

Text Search

10/677980

Baskar, P.
101677980

FILE 'REGISTRY' ENTERED AT 15:50:06 ON 22 NOV 2005
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DICTIONARY FILE UPDATES: 21 NOV 2005 HIGHEST RN 868586-21-4

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TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

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*
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* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

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for details.

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predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

- key terms

L1 E GLYCOPHORIN A/CN 5
27 S GLYCOPHORIN A ?/CN
E BAEBL/CN 5

L8 E FORMAMIDE/CN 5
1 S E3

L13 8 S ("QS-21" OR "DETOX-PC" OR "MPL-SE" OR "MOGM-CSF" OR "TITE
L14 11 S (QS 21 OR DETOX-PC OR MOGM CSF OR TITERMAX G OR CRL 1005
L15 1 S DETOX PC/CN
E MOGM/CN
L16 1 S GCMAF/CN
E TITERMAX/CN 5
L17 2 S E3-4
E "B-ALETHINE"/CN 5
E "B-ALETHINE"/CN 5
L18 1 S E3
L19 19 S L13 OR L14 OR L15 OR L16 OR L17 OR L18

10/677980

L23 1 S PSC 97B/CN
E GERBU/CN
L24 4 S GERBU ?/CN
E "GM-CSF"/CN 5
L28 9 S "GM-CSF"?/CN

FILE 'HCAPLUS' ENTERED AT 15:50:06 ON 22 NOV 2005
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FILE COVERS 1907 - 22 Nov 2005 VOL 143 ISS 22
FILE LAST UPDATED: 21 Nov 2005 (20051121/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

L1 27 SEA FILE=REGISTRY ABB=ON PLU=ON GLYCOPHORIN A ?/CN
L2 12304 SEA FILE=HCAPLUS ABB=ON PLU=ON L1 OR BAEBL OR ERYTHROCYT?
BIND? OR GLYCOPHORIN(W) (A OR B OR C OR E OR HA) OR
(EBA175 OR EBA OR EBP) (S) ERYTHROCYT? OR GLYCOCONNECTIN OR
GLYCO CONNECTIN OR SIALOGLYCOPROTEIN OR SIALO(W) (GLYCOPROTE
IN OR GLYCO PROTEIN) OR SIALOGLYCO PROTEIN
L3 284 SEA FILE=HCAPLUS ABB=ON PLU=ON L2 AND (PLASMODIUM OR
P) (W) FALCIPARUM
L7 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L3 AND FORMAMIDE

L1 27 SEA FILE=REGISTRY ABB=ON PLU=ON GLYCOPHORIN A ?/CN
L2 12304 SEA FILE=HCAPLUS ABB=ON PLU=ON L1 OR BAEBL OR ERYTHROCYT?
BIND? OR GLYCOPHORIN(W) (A OR B OR C OR E OR HA) OR
(EBA175 OR EBA OR EBP) (S) ERYTHROCYT? OR GLYCOCONNECTIN OR
GLYCO CONNECTIN OR SIALOGLYCOPROTEIN OR SIALO(W) (GLYCOPROTE
IN OR GLYCO PROTEIN) OR SIALOGLYCO PROTEIN
L3 284 SEA FILE=HCAPLUS ABB=ON PLU=ON L2 AND (PLASMODIUM OR
P) (W) FALCIPARUM
L13 8 SEA FILE=REGISTRY ABB=ON PLU=ON ("QS-21" OR "DETOX-PC"
OR "MPL-SE" OR "MOGM-CSF" OR "TITERMAX-G" OR "CRL-1005" OR
GERBU OR TERAMIDE OR PSC97B OR ADJUMER OR "PG-026" OR
"GSK-1" OR GCMF OR "B-ALETHINE" OR "MPC-026" OR ADJUVAX
OR CPG ODN OR BETAFFECTIN OR ALUM OR MF59)/CN
L14 11 SEA FILE=REGISTRY ABB=ON PLU=ON (QS 21 OR DETOX-PC OR
MOGM CSF OR TITERMAX G OR CRL 1005 OR PSC 97B OR ADJUMER
OR PG 026 OR GSK 1 OR B ALETHINE OR MPC 026 OR BETAFFECTIN
OR ALUM OR MF 59)/CN

Searcher : Shears 571-272-2528

10/677980

L15 1 SEA FILE=REGISTRY ABB=ON PLU=ON DETOX PC/CN
L16 1 SEA FILE=REGISTRY ABB=ON PLU=ON GCMAF/CN
L17 2 SEA FILE=REGISTRY ABB=ON PLU=ON (TITERMAX/CN OR "TITERMAX
GOLD"/CN)
L18 1 SEA FILE=REGISTRY ABB=ON PLU=ON B-ALETHINE/CN
L19 19 SEA FILE=REGISTRY ABB=ON PLU=ON L13 OR L14 OR L15 OR L16
OR L17 OR L18
L20 47043 SEA FILE=HCAPLUS ABB=ON PLU=ON L19 OR QS21 OR QS 21 OR
DETOX PC OR MPL SE OR MOGM OR TITERMAX OR CRL 1005 OR
GERBU OR TERAMIDE OR PSC97B OR ADJUMER OR (PG OR MPC) (W) (02
6 OR 26) OR GSK(W) (1 OR I) OR GCMAF OR (B OR BETA) (W) ALETHI
NE OR ADJUVAX OR CPG ODN OR BETAFFECTIN OR ALUM OR MF59 OR
MF 59
L23 1 SEA FILE=REGISTRY ABB=ON PLU=ON PSC 97B/CN
L24 4 SEA FILE=REGISTRY ABB=ON PLU=ON GERBU ?/CN
L28 9 SEA FILE=REGISTRY ABB=ON PLU=ON "GM-CSF"?/CN
L29 68994 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 OR L23 OR L24 OR PSC
97B OR L28 OR GMCSF OR (GM OR GRANUL?) (1W) (CSF OR COLONY
STIMUL?)
L30 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L3 AND L29

L32 4 L7 OR L30

L32 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN

ED Entered STN: 11 Oct 2002

ACCESSION NUMBER: 2002:777627 HCAPLUS .

DOCUMENT NUMBER: 137:293522

TITLE: **Plasmodium falciparum**
erythrocyte binding protein
BAEBL for use as vaccine against malarial
Plasmodium parasite

INVENTOR(S): Mayer, Ghislaine; Miller, Louis H.

PATENT ASSIGNEE(S): The Government of the United States of America,
Represented by the Secretary, Department of Health
and Human Services, USA

SOURCE: PCT Int. Appl., 57 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|---|----------|-----------------|------------|
| ----- | ---- | ----- | ----- | ----- |
| WO 2002078603 | A2 | 20021010 | WO 2002-US10071 | 20020329 |
| WO 2002078603 | A3 | 20030828 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| US 2005239730 | A1 | 20051027 | US 2003-677980 | 20031002 |
| PRIORITY APPLN. INFO.: | | | US 2001-281130P | P 20010402 |

Searcher : Shears 571-272-2528

- AB The invention relates to **Plasmodium falciparum**
Erythrocyte Binding Protein BAEBL for use
as a vaccine.
- IT **83869-56-1, GM-CSF**
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(**MoGM-CSF; Plasmodium falciparum**
erythrocyte binding protein BAEBL for
use as vaccine against malarial Plasmodium parasite)
- IT **646-08-2, β -Alethine**
9051-97-2, Adjuvax 141256-04-4, QS
-21 152521-52-3, Betafectin
172889-84-8, MF59 213018-95-2,
GERBU vaccine adjuvant 263746-33-4, Adjumer
263746-52-7, Detox-PC 263746-55-0
, GSK-1 263746-77-6, PG-
026 263757-02-4, GcMAF 263757-05-7
, MPC-026 263757-16-0, MPL-
SE 467423-50-3, TERamide
467423-52-5, PSC 97B
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(**Plasmodium falciparum erythrocyte**
binding protein BAEBL for use as vaccine against
malarial Plasmodium parasite)
- IT **106392-12-5, CRL-1005**
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(**TiterMax-Gold; Plasmodium falciparum**
erythrocyte binding protein BAEBL for
use as vaccine against malarial Plasmodium parasite)

L32 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN

ED Entered STN: 31 Aug 2001

ACCESSION NUMBER: 2001:635921 HCAPLUS

DOCUMENT NUMBER: 135:200402

TITLE: Novel method for down-regulation of amyloid

INVENTOR(S): Birk, Peter; Jensen, Martin Roland; Nielsen, Klaus
Gregorius

PATENT ASSIGNEE(S): M & E Biotech A/S, Den.

SOURCE: PCT Int. Appl., 120 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 6

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|---|----------|-----------------|----------|
| WO 2001062284 | A2 | 20010830 | WO 2001-DK113 | 20010219 |
| WO 2001062284 | A3 | 20011129 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, | | | |

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UA, UG, US, UZ, VN, YU, ZA, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH,
 CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,
 TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

| | | | | |
|--|----|----------|-----------------|------------|
| CA 2400838 | AA | 20010830 | CA 2001-2400838 | 20010219 |
| AU 2001033620 | A5 | 20010903 | AU 2001-33620 | 20010219 |
| AU 783144 | B2 | 20050929 | | |
| BR 2001008566 | A | 20021119 | BR 2001-8566 | 20010219 |
| EP 1259251 | A2 | 20021127 | EP 2001-905632 | 20010219 |
| EP 1259251 | B1 | 20051019 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| JP 2003523402 | T2 | 20030805 | JP 2001-561348 | 20010219 |
| NZ 521442 | A | 20030926 | NZ 2001-521442 | 20010219 |
| EE 200200444 | A | 20031215 | EE 2002-444 | 20010219 |
| CA 2440197 | AA | 20020829 | CA 2002-2440197 | 20020219 |
| US 2002119162 | A1 | 20020829 | US 2002-80101 | 20020219 |
| WO 2002066056 | A2 | 20020829 | WO 2002-DK112 | 20020219 |
| WO 2002066056 | A3 | 20030103 | | |
| WO 2002066056 | C1 | 20040429 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1363664 | A2 | 20031126 | EP 2002-700174 | 20020219 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| JP 2004529881 | T2 | 20040930 | JP 2002-565614 | 20020219 |
| NZ 527720 | A | 20050324 | NZ 2002-527720 | 20020219 |
| ZA 2002004830 | A | 20030915 | ZA 2002-4830 | 20020614 |
| US 2003086938 | A1 | 20030508 | US 2002-204362 | 20020816 |
| NO 2002003961 | A | 20020820 | NO 2002-3961 | 20020820 |
| US 2004191264 | A1 | 20040930 | US 2003-643103 | 20030818 |
| ZA 2003006422 | A | 20041118 | ZA 2003-6422 | 20030818 |
| PRIORITY APPLN. INFO.: | | | DK 2000-265 | A 20000221 |
| | | | US 2000-186295P | P 20000301 |
| | | | WO 2001-DK113 | W 20010219 |
| | | | US 2001-785215 | A 20010220 |
| | | | DK 2001-1231 | A 20010820 |
| | | | US 2001-337543P | P 20011022 |
| | | | WO 2002-DK112 | W 20020219 |

AB Disclosed are novel methods for combating diseases characterized by deposition of amyloid. The methods generally rely on immunization against amyloidogenic proteins (proteins contributing to formation of amyloid) such as beta amyloid (A β). Immunization is preferably effected by administration of analogs of autologous amyloidogenic

Searcher : Shears 571-272-2528

polypeptides, said analogs being capable of inducing antibody production against the autologous amyloidogenic polypeptides. Especially preferred as an immunogen is autologous A β which has been modified by introduction of one single or a few foreign, immunodominant and promiscuous T-cell epitopes while substantially preserving the majority of A β 's B-cell epitopes. Also disclosed are nucleic acid vaccination against amyloidogenic polypeptides and vaccination using live vaccines as well as methods and means useful for the vaccination. Such methods and means include methods for identification of useful immunogenic analogs of the amyloidogenic proteins, methods for the preparation of analogs and pharmaceutical formulations, as well as nucleic acid fragments, vectors, transformed cells, polypeptides and pharmaceutical formulations.

IT 83869-56-1, Gmcsf

RL: BPR (Biological process); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(vaccine for down-regulation of amyloid)

L32 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN

ED Entered STN: 14 Apr 2000

ACCESSION NUMBER: 2000:240985 HCAPLUS

DOCUMENT NUMBER: 132:292701

TITLE: Novel methods for therapeutic vaccination

INVENTOR(S): Steinaa, Lucilla; Mouritsen, Soren; Nielsen, Klaus
Gregorious; Haaning, Jesper; Leach, Dana; Dalum, Iben; Gautam, Anand; Birk, Peter; Karlsson, Gunilla

PATENT ASSIGNEE(S): M & E Biotech A/S, Den.

SOURCE: PCT Int. Appl., 220 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-------------------|----------|
| WO 2000020027 | A2 | 20000413 | WO 1999-DK525 | 19991005 |
| WO 2000020027 | A3 | 20001012 | | |
| W: | AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| CA 2345817 | AA | 20000413 | CA 1999-2345817 | 19991005 |
| AU 9958510 | A1 | 20000426 | AU 1999-58510 | 19991005 |
| AU 751709 | B2 | 20020822 | | |
| EP 1117421 | A2 | 20010725 | EP 1999-945967 | 19991005 |
| EP 1117421 | B1 | 20040616 | | |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, MC, IE, SI, LT, LV, FI, RO | | | |
| TR 200100936 | T2 | 20010821 | TR 2001-200100936 | 19991005 |
| JP 2002526419 | T2 | 20020820 | JP 2000-573386 | 19991005 |

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| | | | | |
|--|----|----------|-----------------|-------------|
| EE 200100203 | A | 20021015 | EE 2001-203 | 19991005 |
| NZ 511055 | A | 20031031 | NZ 1999-511055 | 19991005 |
| AT 269100 | E | 20040715 | AT 1999-945967 | 19991005 |
| PT 1117421 | T | 20041130 | PT 1999-945967 | 19991005 |
| ES 2222728 | T3 | 20050201 | ES 1999-945967 | 19991005 |
| EP 1502602 | A2 | 20050202 | EP 2004-76709 | 19991005 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL | | | | |
| NO 2001001586 | A | 20010531 | NO 2001-1586 | 20010328 |
| ZA 2001002603 | A | 20020930 | ZA 2001-2603 | 20010329 |
| HR 2001000319 | A1 | 20020630 | HR 2001-319 | 20010504 |
| US 2004141958 | A1 | 20040722 | US 2003-441779 | 20030519 |
| PRIORITY APPLN. INFO.: | | | DK 1998-1261 | A 19981005 |
| | | | US 1998-105011P | P 19981020 |
| | | | EP 1999-945967 | A3 19991005 |
| | | | US 1999-413186 | A1 19991005 |
| | | | WO 1999-DK525 | W 19991005 |

AB A method is disclosed for inducing cell-mediated immunity against cellular antigens. More specifically, the invention provides for a method for inducing cytotoxic T-lymphocyte immunity against weak antigens, notably self-proteins. The method entails that antigen presenting cells are induced to present at least one CTL epitope of the weak antigen and at the same time presenting at least one foreign T-helper lymphocyte epitope. In a preferred embodiment, the antigen is a cancer specific antigen, e.g. prostate specific membrane antigen (PSM), Her2, or FGF8b. The method can be exercised by using traditional polypeptide vaccination, but also by using live attenuated vaccines or nucleic acid vaccination. The invention furthermore provides immunogenic analogs of PSM, Her2 and FGF8b, as well as nucleic acid mols. encoding these analogs. Also vectors and transformed cells are disclosed. The invention also provides for a method for identification of immunogenic analogs of weak or non-immunogenic antigens.

IT 3700-67-2 83869-56-1, GM-CSF
141256-04-4, QS21

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(weak antigens inserted with foreign T cell epitope as vaccines)

L32 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN

ED Entered STN: 10 Feb 1999

ACCESSION NUMBER: 1999:85374 HCAPLUS

DOCUMENT NUMBER: 130:250895

TITLE: Model multiple antigenic and homopolymeric peptides from non-repetitive sequences of malaria merozoite proteins elicit biologically irrelevant antibodies

AUTHOR(S): Ramasamy, R.; Kanagaratnam, R.; Chandanie, P. D. F.; Kulachelvy, K.; Ramasamy, M. S.; Dharmasena, P. M.

CORPORATE SOURCE: Molecular Biology Immunology Laboratories, Division Life Sciences, Institute Fundamental Studies, Kandy, Sri Lanka

SOURCE: Biochimica et Biophysica Acta, Molecular Basis of Disease (1999), 1453(1), 115-125

Searcher : Shears 571-272-2528

CODEN: BBADEX; ISSN: 0925-4439
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Three model peptides containing B-epitopes from conserved, non-repetitive regions of the merozoite surface antigens, MSA2 and MSA1, and the **erythrocyte binding protein EBP** of **Plasmodium falciparum** were synthesized. The peptides incorporated GPG spacers and C residues at the N and C termini, and were polymerized by oxidation to form cystine bridges.

Multiple

copies of essentially the same peptide sequences were also synthesized on a branching lysyl matrix to form a tetrameric multiple antigen peptide. Rabbits were immunized with the polymerized and multiple antigen peptides, in **alum** followed by Freund's adjuvant, and the antibody responses examined by IFA and ELISA. Reproducible antibody responses were obtained against the MSA1 and EBP but not MSA2 peptides. IgG antibody levels detected by ELISA after three injections of antigen in **alum**, increased significantly after further immunization in Freund's adjuvant. IgG levels were largely maintained for at least 23 wk after the final immunization. IgM antibodies, generally detectable only after immunization in Freund's adjuvant, were absent 23 wk later. Antibody titers against the native protein on fixed parasites, assayed by IFA, were three to five orders of magnitude lower than the corresponding ELISA titers against the peptides. Antibody-dependent inhibition of **P. falciparum** growth in vitro could not be demonstrated with the immune rabbit sera. The MSA1 and EBP peptides elicited cross-reactive antibodies. The results suggest that the selected non-repetitive sequences are conformationally constrained in the native proteins and only a small proportion of the anti-peptide antibodies bind to the native proteins. The significance of the findings for the development of peptide vaccines and the use of peptides in immunoassays is discussed.

REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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FILE 'JAPIO' ENTERED AT 15:50:30 ON 22 NOV 2005

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L33 1 S L7
L34 10 S L30
L35 10 S L33 OR L34
L36 6 DUP REM L35 (4 DUPLICATES REMOVED)

L36 ANSWER 1 OF 6 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN
ACCESSION NUMBER: 2003-092869 [08] WPIDS
DOC. NO. CPI: C2003-023133
TITLE: New vaccine against malaria **Plasmodium**
falciparum parasite comprising
Erythrocyte Binding Protein
polypeptide.
DERWENT CLASS: B04 C06 D16
INVENTOR(S): MAYER, G; MILLER, L H
PATENT ASSIGNEE(S): (USSH) US DEPT HEALTH & HUMAN SERVICES; (MAYE-I)
MAYER G; (MILL-I) MILLER L H
COUNTRY COUNT: 100
PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|--|------|----------|-----------|----|----|
| WO 2002078603 | A2 | 20021010 | (200308)* | EN | 55 |
| RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW | | | | | |
| MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW | | | | | |
| W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE | | | | | |
| DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG | | | | | |
| KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM | | | | | |
| PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ | | | | | |
| VN YU ZA ZM ZW | | | | | |
| AU 2002338238 | A1 | 20021015 | (200432) | | |
| US 2005239730 | A1 | 20051027 | (200571) | | |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|----------------|-----------------|----------|
| WO 2002078603 | A2 | WO 2002-US10071 | 20020329 |
| AU 2002338238 | A1 | AU 2002-338238 | 20020329 |
| US 2005239730 | A1 Provisional | US 2001-281130P | 20010402 |
| | Cont of | WO 2002-US10071 | 20020329 |
| | | US 2003-677980 | 20031002 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---------------|-------------|---------------|
| AU 2002338238 | A1 Based on | WO 2002078603 |

PRIORITY APPLN. INFO: US 2001-281130P 20010402; US
2003-677980 20031002

AN 2003-092869 [08] WPIDS

AB WO 200278603 A UPAB: 20030204

NOVELTY - A new vaccine composition comprises a polypeptide or polynucleotide and a vehicle. The polypeptide or polynucleotide comprises an amino acid or nucleic acid sequence, respectively, that encodes a **BAEBL** polypeptide or its portion.

ACTIVITY - Protozoacide; Immunostimulant.

Searcher : Shears 571-272-2528

No biological data given.

MECHANISM OF ACTION - Vaccine.

No biological data given.

USE - The vaccine composition is useful for preparing a medicament for vaccinating a human against a malaria Plasmodium parasite (claimed).

Dwg.0/7

L36 ANSWER 2 OF 6 EMBASE COPYRIGHT (c) 2005 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2002073898 EMBASE
 TITLE: A multilateral effort to develop DNA vaccines against falciparum malaria.
 AUTHOR: Kumar S.; Epstein J.E.; Richie T.L.; Nkrumah F.K.; Soisson L.; Carucci D.J.; Hoffman S.L.
 CORPORATE SOURCE: S. Kumar, Malaria Program, Naval Medical Research Center, Silver Spring, MD 20910, United States. kumars@nmrc.navy.mil
 SOURCE: Trends in Parasitology, (1 Mar 2002) Vol. 18, No. 3, pp. 129-135.
 Refs: 55
 ISSN: 1471-4922 CODEN: TPRACT
 PUBLISHER IDENT.: S 1471-4922(01)02207-3
 COUNTRY: United Kingdom
 DOCUMENT TYPE: Journal; General Review
 FILE SEGMENT: 004 Microbiology
 026 Immunology, Serology and Transplantation
 037 Drug Literature Index
 LANGUAGE: English
 SUMMARY LANGUAGE: English
 ENTRY DATE: Entered STN: 20020307
 Last Updated on STN: 20020307

AB Scientists from several organizations worldwide are working together to develop a multistage, multigene DNA-based vaccine against **Plasmodium falciparum** malaria. This collaborative vaccine development effort is named Multi-Stage DNA-based Malaria Vaccine Operation. An advisory board of international experts in vaccinology, malariology and field trials provides the scientific oversight to support the operation. This article discusses the rationale for the approach, underlying concepts and the pre-clinical development process, and provides a brief outline of the plans for the clinical testing of a multistage, multiantigen malaria vaccine based on DNA plasmid immunization technology.

L36 ANSWER 3 OF 6 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 2001:8135 BIOSIS
 DOCUMENT NUMBER: PREV200100008135
 TITLE: Protection of Aotus monkeys by **Plasmodium falciparum** EBA-175 region II DNA prime-boost immunization regimen.
 AUTHOR(S): Jones, T. R. [Reprint author]; Narum, D. L.; Gozalo, A. S.; Aguiar, J.; Fuhrmann, S. R.; Liang, H.; Haynes, J. D.; Moch, J. K.; Lucas, C.; Luu, T.; Magill, A. J.; Hoffman, S. L.; Sim, B. K. L.
 CORPORATE SOURCE: Malaria Program, Naval Medical Research Center, Silver Spring, MD, USA
 SOURCE: American Journal of Tropical Medicine and Hygiene, (March, 2000) Vol. 62, No. 3 Supplement, pp. 178-179.

print.

Meeting Info.: 49th Annual Meeting of the American Society of Tropical Medicine and Hygiene. Houston, Texas, USA. October 29-November 02, 2000. American Society of Tropical Medicine and Hygiene.

CODEN: AJTHAB. ISSN: 0002-9637.

DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LANGUAGE: English
ENTRY DATE: Entered STN: 21 Dec 2000
Last Updated on STN: 21 Dec 2000

L36 ANSWER 4 OF 6 MEDLINE on STN DUPLICATE 1
ACCESSION NUMBER: 1999143796 MEDLINE
DOCUMENT NUMBER: PubMed ID: 9989251
TITLE: Model multiple antigenic and homopolymeric peptides from non-repetitive sequences of malaria merozoite proteins elicit biologically irrelevant antibodies.
AUTHOR: Ramasamy R; Kanagaratnam R; Chandanie P D; Kulachelvy K; Ramasamy M S; Dharmasena P M
CORPORATE SOURCE: Molecular Biology Laboratory, Institute of Fundamental Studies, Kandy, Sri Lanka.. ramasamy@slt.lk
SOURCE: Biochimica et biophysica acta, (1999 Jan 6) 1453 (1) 115-25.
Journal code: 0217513. ISSN: 0006-3002.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199902
ENTRY DATE: Entered STN: 19990311
Last Updated on STN: 19990311
Entered Medline: 19990225

AB Three model peptides containing B-epitopes from conserved, non-repetitive regions of the merozoite surface antigens, MSA2 and MSA1, and the **erythrocyte binding protein EBP of Plasmodium falciparum** were synthesised. The peptides incorporated GPG spacers and C residues at the N and C termini, and were polymerised by oxidation to form cystine bridges. Multiple copies of essentially the same peptide sequences were also synthesised on a branching lysyl matrix to form a tetrameric multiple antigen peptide. Rabbits were immunised with the polymerised and multiple antigen peptides, in **alum** followed by Freund's adjuvant, and the antibody responses examined by IFA and ELISA. Reproducible antibody responses were obtained against the MSA1 and EBP but not MSA2 peptides. IgG antibody levels detected by ELISA after three injections of antigen in **alum**, increased significantly after further immunisation in Freund's adjuvant. IgG levels were largely maintained for at least 23 weeks after the final immunisation. IgM antibodies, generally detectable only after immunisation in Freund's adjuvant, were absent 23 weeks later. Antibody titres against the native protein on fixed parasites, assayed by IFA, were three to five orders of magnitude lower than the corresponding ELISA titres against the peptides. Antibody-dependent inhibition of **P. falciparum** growth in vitro could not be demonstrated with the immune rabbit sera. The MSA1 and EBP peptides elicited cross-reactive antibodies. The results suggest that the selected non-repetitive sequences are conformationally constrained in the native proteins and only a small proportion of the anti-peptide

antibodies bind to the native proteins. The significance of the findings for the development of peptide vaccines and the use of peptides in immunoassays is discussed.

L36 ANSWER 5 OF 6 MEDLINE on STN DUPLICATE 2
 ACCESSION NUMBER: 97155716 MEDLINE
 DOCUMENT NUMBER: PubMed ID: 9002371
 TITLE: Malaria vaccine.
 AUTHOR: Khurana S K; Talib V H
 CORPORATE SOURCE: Department of Laboratory Medicine, Safdarjang Hospital, New Delhi.
 SOURCE: Indian journal of pathology & microbiology, (1996 Dec) 39 (5) 433-41.
 Journal code: 7605904. ISSN: 0377-4929.
 PUB. COUNTRY: India
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 199703
 ENTRY DATE: Entered STN: 19970313
 Last Updated on STN: 19970313
 Entered Medline: 19970304

AB Recently it has become evident that the same candidate antigen can be shared by several of the parasite stages, and thus the concept of a multistage vaccine is becoming more and more attractive. A TDR Task Force evaluated the promise and stage of development of some 20 existing asexual blood stage candidate antigens and prepared a strategy for their development leading to clinical testing and field trials. Amongst these are merozoite surface protein 1 (MSP-1), Serine Rich Antigen (SERA), Apical Membrane Antigen (AMA-1), and **Erythrocyte Binding Antigen (EBA)**. A field study conducted in Tanzanian children showed that the SPf66 Colombian vaccine was safe, induced antibodies, and reduced the risk of developing clinical malaria by around 30%. This study, confirmed the potential of the vaccine to confer partial protection in areas of high as well as low intensity of transmission. Pfs25 is a leading candidate antigen for a transmission blocking vaccine. It is found in the ookinete stage of the parasite in the mosquito midgut. Gramme amounts of GMP-grade material have been produced and a vaccine based on the Pfs25 antigen formulated with **alum** should have gone into phase I and II clinical trials in the USA and Africa during 1995. Because the first malaria prototype vaccine to be tried out in people on a large scale has been the polymerized synthetic peptide developed by Patarroye on the basis of the SPf66 antigen of *P. falciparum*, the results are with much interest. It is still premature to predict the effectiveness of this vaccine globally, but its development will encourage further progress in a field that has repeatedly been characterized by raised and then dashed hopes. These various vaccines are based on the classical approach to vaccination, which is to raise host immunity against the parasite so as to reduce parasite densities or to sterilize an infection. A newer approach is development of antidiarrhoeal vaccines which aim to alleviate morbidity by suppressing immunopathology in the host. Antidiarrhoeal vaccines are based on neutralizing parasite components that induce host pathology, leaving the parasite itself directly unaffected. These effects would occur when each type of the disease is considered by itself; however, synergistic effects may be expected when they are used in combination. The rationale for vaccines based on any of these stages was that immunization of various hosts with whole parasites of each of these

stages has been able to induce protection or total transmission-blocking immunity. Less significant but not to be discounted is the fact that natural malaria infections in humans have been shown to induce immunity against every one of these parasite stages against which vaccines are being developed, an exception to this are those stages that are present only in the mosquito vector with component molecules not presented to the human host, such as exclusively ookinete antigens. For several very apparent reasons a vaccine today is conceived of as subunit as opposed to showl parasite vaccines, either in the form of a recombinant product or as synthetic peptide constructs. Genes coding for several antigens of *P. falciparum* and some of *P. vivax* have been seems to be common to many Plasmodium antigens; this is that they contain tandem repeats of oligopeptide sequences which often code for immunodominant epitopes. Following several decades of research on malaria vaccine development, the field at a glance may present a conflicting picture, with several achievements, and some disappointments and controversies. Issues facing the development of a malaria vaccine are complex. It is not clear how far we may yet be from achieving this goal. The work of the past decades has laid an extensive foundation of relevant knowledge and technologies, and the goal it self remains as important as ever, will scientists remain committed to this objective?

L36 ANSWER 6 OF 6 EMBASE COPYRIGHT (c) 2005 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 94150771 EMBASE

DOCUMENT NUMBER: 1994150771

TITLE: Clinical trials of *Plasmodium falciparum* erythrocytic stage vaccines.

AUTHOR: Ballou W.R.

CORPORATE SOURCE: Communicable Disease/Immunol. Div., Department of Immunology, Walter Reed Army Inst. of Research, Washington, DC 20307-5100, United States

SOURCE: American Journal of Tropical Medicine and Hygiene, (1994) Vol. 50, No. 4 SUPPL., pp. 59-65.

ISSN: 0002-9637 CODEN: AJTHAB

COUNTRY: United States

DOCUMENT TYPE: Journal; Conference Article

FILE SEGMENT: 004 Microbiology

017 Public Health, Social Medicine and Epidemiology

026 Immunology, Serology and Transplantation

037 Drug Literature Index

LANGUAGE: English

SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 940622

Last Updated on STN: 940622

AB Efficacy trials for malaria blood-stage vaccines are currently underway in several field sites. Numerous issues surround the design and execution of such trials, and there are many opportunities for failure that have little to do with the vaccines per se. This review highlights some of the key issues to be considered by investigators designing such trials, including those that are unique to trials for erythrocytic stage vaccines.

FILE 'USPATFULL' ENTERED AT 15:58:53 ON 22 NOV 2005

CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 22 Nov 2005 (20051122/PD)

FILE LAST UPDATED: 22 Nov 2005 (20051122/ED)

HIGHEST GRANTED PATENT NUMBER: US6968571
 HIGHEST APPLICATION PUBLICATION NUMBER: US2005257307
 CA INDEXING IS CURRENT THROUGH 22 Nov 2005 (20051122/UPCA)
 ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 22 Nov 2005 (20051122/PD)
 REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2005
 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2005

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>>> USPAT2 is now available.  USPATFULL contains full text of the  <<<
>>> original, i.e., the earliest published granted patents or  <<<
>>> applications.  USPAT2 contains full text of the latest US  <<<
>>> publications, starting in 2001, for the inventions covered in  <<<
>>> USPATFULL.  A USPATFULL record contains not only the original  <<<
>>> published document but also a list of any subsequent  <<<
>>> publications.  The publication number, patent kind code, and  <<<
>>> publication date for all the US publications for an invention  <<<
>>> are displayed in the PI (Patent Information) field of USPATFULL  <<<
>>> records and may be searched in standard search fields, e.g., /PN, <<<
>>> /PK, etc.  <<<

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>>> through the new cluster USPATALL.  Type FILE USPATALL to  <<<
>>> enter this cluster.  <<<
>>> Use USPATALL when searching terms such as patent assignees,  <<<
>>> classifications, or claims, that may potentially change from  <<<
>>> the earliest to the latest publication.  <<<
```

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L1      27 SEA FILE=REGISTRY ABB=ON  PLU=ON  GLYCOPHORIN A ?/CN
L2      12304 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L1 OR BAEBL OR ERYTHROCYT?
        BIND? OR GLYCOPHORIN(W) (A OR B OR C OR E OR HA) OR
        (EBA175 OR EBA OR EBP) (S) ERYTHROCYT? OR GLYCOCONNECTIN OR
        GLYCO CONNECTIN OR SIALOGLYCOPROTEIN OR SIALO(W) (GLYCOPROTE
        IN OR GLYCO PROTEIN) OR SIALOGLYCO PROTEIN
L3      284 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L2 AND (PLASMODIUM OR
        P) (W) FALCIPARUM
L8      1 SEA FILE=REGISTRY ABB=ON  PLU=ON  FORMAMIDE/CN
L9      23155 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L8 OR FORMAMIDE OR
        FORMIMIDIC OR METHANAMIDE OR NSC 748 OR NSC748
L13     8 SEA FILE=REGISTRY ABB=ON  PLU=ON  ("QS-21" OR "DETOX-PC"
        OR "MPL-SE" OR "MOGM-CSF" OR "TITERMAX-G" OR "CRL-1005" OR
        GERBU OR TERAMIDE OR PSC97B OR ADJUMER OR "PG-026" OR
        "GSK-1" OR GCMAF OR "B-ALETHINE" OR "MPC-026" OR ADJUVAX
        OR CPG ODN OR BETAPECTIN OR ALUM OR MF59)/CN
L14     11 SEA FILE=REGISTRY ABB=ON  PLU=ON  (QS 21 OR DETOX-PC OR
        MOGM CSF OR TITERMAX G OR CRL 1005 OR PSC 97B OR ADJUMER
        OR PG 026 OR GSK 1 OR B ALETHINE OR MPC 026 OR BETAPECTIN
        OR ALUM OR MF 59)/CN
L15     1 SEA FILE=REGISTRY ABB=ON  PLU=ON  DETOX PC/CN
L16     1 SEA FILE=REGISTRY ABB=ON  PLU=ON  GCMAF/CN
L17     2 SEA FILE=REGISTRY ABB=ON  PLU=ON  (TITERMAX/CN OR "TITERMAX
        GOLD"/CN)
L18     1 SEA FILE=REGISTRY ABB=ON  PLU=ON  B-ALETHINE/CN
L19     19 SEA FILE=REGISTRY ABB=ON  PLU=ON  L13 OR L14 OR L15 OR L16
        OR L17 OR L18
L20     47043 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L19 OR QS21 OR QS 21 OR
        DETOX PC OR MPL SE OR MOGM OR TITERMAX OR CRL 1005 OR
```

10/677980

GERBU OR TERAMIDE OR PSC97B OR ADJUMER OR (PG OR MPC) (W) (02
6 OR 26) OR GSK(W) (1 OR I) OR GCMAF OR (B OR BETA) (W) ALETHI
NE OR ADJUVAX OR CPG ODN OR BETAPECTIN OR ALUM OR MF59 OR
MF 59

L23 1 SEA FILE=REGISTRY ABB=ON PLU=ON PSC 97B/CN
L24 4 SEA FILE=REGISTRY ABB=ON PLU=ON GERBU ?/CN
L28 9 SEA FILE=REGISTRY ABB=ON PLU=ON "GM-CSF"?/CN
L29 68994 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 OR L23 OR L24 OR PSC
97B OR L28 OR GMCFSF OR (GM OR GRANUL?) (1W) (CSF OR COLONY
STIMUL?)
L37 59 SEA FILE=USPATFULL ABB=ON PLU=ON L3 AND L29
L38 15 SEA FILE=USPATFULL ABB=ON PLU=ON L37 AND (L9 OR FORMAMIDE
)

L38 ANSWER 1 OF 15 USPATFULL on STN

ACCESSION NUMBER: 2005:275167 USPATFULL

TITLE: **Plasmodium falciparum**
erythrocyte binding protein
baebl for use as a vaccine

INVENTOR(S): Mayer, Ghislaine, Gaithersburg, MD, UNITED STATES
Miller, Louis H., Rockville, MD, UNITED STATES

| | NUMBER | KIND | DATE |
|-----------------------|--|------|---------------|
| PATENT INFORMATION: | US 2005239730 | A1 | 20051027 |
| APPLICATION INFO.: | US 2003-677980 | A1 | 20031002 (10) |
| RELATED APPLN. INFO.: | Continuation of Ser. No. WO 2002-US10071, filed on 29 Mar 2002, PENDING | | |

| | NUMBER | DATE |
|--|--|---------------|
| PRIORITY INFORMATION: | US 2001-281130P | 20010402 (60) |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | APPLICATION | |
| LEGAL REPRESENTATIVE: | KNOBBE MARTENS OLSON & BEAR LLP, 2040 MAIN STREET, FOURTEENTH FLOOR, IRVINE, CA, 92614, US | |
| NUMBER OF CLAIMS: | 23 | |
| EXEMPLARY CLAIM: | 1 | |
| NUMBER OF DRAWINGS: | 8 Drawing Page(s) | |
| LINE COUNT: | 1806 | |
| CAS INDEXING IS AVAILABLE FOR THIS PATENT. | | |
| AB | The invention relates to Plasmodium falciparum Erythrocyte Binding Protein BAEBL for use as a vaccine. | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L38 ANSWER 2 OF 15 USPATFULL on STN

ACCESSION NUMBER: 2005:274547 USPATFULL

TITLE: Flea head, nerve cord, hindgut and malpighian
tubule nucleic acid molecules, proteins and uses
thereof

INVENTOR(S): Brandt, Kevin S., Windsor, CO, UNITED STATES
Gaines, Patrick J., Fort Collins, CO, UNITED STATES
Stinchcomb, Dan T., Fort Collins, CO, UNITED STATES
Wisnewski, Nancy, Fort Collins, CO, UNITED STATES

PATENT ASSIGNEE(S): Heska Corporation (U.S. corporation)

| NUMBER | KIND | DATE |
|--------|------|------|
|--------|------|------|

Searcher : Shears 571-272-2528

 PATENT INFORMATION: US 2005239103 A1 20051027
 APPLICATION INFO.: US 2004-978245 A1 20041029 (10)
 RELATED APPLN. INFO.: Continuation of Ser. No. US 2001-991936, filed on
 21 Nov 2001, PENDING Division of Ser. No. US
 2000-543668, filed on 7 Apr 2000, ABANDONED

| | NUMBER | DATE |
|-----------------------|---|---------------|
| | ----- | ----- |
| PRIORITY INFORMATION: | US 1999-128704P | 19990409 (60) |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | APPLICATION | |
| LEGAL REPRESENTATIVE: | HESKA CORPORATION, INTELLECTUAL PROPERTY DEPT., 3760 ROCKY MOUNTAIN AVE, LOVELAND, CO, 80538, US | |
| NUMBER OF CLAIMS: | 21 | |
| EXEMPLARY CLAIM: | 1 | |
| LINE COUNT: | 7785 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to flea head, nerve cord, hindgut and Malpighian tubule proteins; to flea head, nerve cord, hindgut and Malpighian tubule nucleic acid molecules, including those that encode such flea head, nerve cord, hindgut and Malpighian tubule proteins; to antibodies raised against such flea head, nerve cord, hindgut and Malpighian tubule proteins; and to compounds that inhibit flea head, nerve cord, hindgut and Malpighian tubule protein activity. The present invention also includes methods to obtain such proteins, nucleic acid molecules, antibodies, and inhibitory compounds. Also included in the present invention are therapeutic compositions comprising proteins, nucleic acid molecules, or protective compounds derived from proteins of the present invention as well as the use of such therapeutic compositions to protect animals from flea infestation. Also included in the present invention is the use of flea head, nerve cord, hindgut and Malpighian tubule proteins to derive inhibitory compounds.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L38 ANSWER 3 OF 15 USPATFULL on STN

ACCESSION NUMBER: 2005:240602 USPATFULL
 TITLE: 89 human secreted proteins
 INVENTOR(S): Rosen, Craig A., Laytonsville, MD, UNITED STATES
 Baker, Kevin P., Darnestown, MD, UNITED STATES
 Birse, Charles E., North Potomac, MD, UNITED STATES
 Choi, Gil H., Rockville, MD, UNITED STATES
 Fiscella, Michele, Bethesda, MD, UNITED STATES
 Komatsoulis, George A., Silver Spring, MD, UNITED STATES
 Moore, Paul A., North Bethesda, MD, UNITED STATES
 Ni, Jian, Germantown, MD, UNITED STATES
 Olsen, Henrik S., Gaithersburg, MD, UNITED STATES
 Ruben, Steven M., Brookeville, MD, UNITED STATES
 Wei, Ping, Agoura Hills, CA, UNITED STATES
 Duan, D. Roxanne, Bethesda, MD, UNITED STATES
 Shi, Yanggu, Gaithersburg, MD, UNITED STATES

| | NUMBER | KIND | DATE |
|---------------------|----------------|-------|---------------|
| | ----- | ----- | ----- |
| PATENT INFORMATION: | US 2005208602 | A1 | 20050922 |
| APPLICATION INFO.: | US 2004-773236 | A1 | 20040209 (10) |

Searcher : Shears 571-272-2528 .

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. WO 2002-US25107, filed on 8 Aug 2002, PENDING Continuation-in-part of Ser. No. WO 2002-US33985, filed on 24 Oct 2002, PENDING Continuation-in-part of Ser. No. WO 2002-US35606, filed on 6 Nov 2002, PENDING Continuation-in-part of Ser. No. WO 2003-US4819, filed on 20 Feb 2003, PENDING Continuation-in-part of Ser. No. WO 2003-US4818, filed on 20 Feb 2003, PENDING

| | NUMBER | DATE |
|-----------------------|--|---------------|
| PRIORITY INFORMATION: | US 2001-311085P | 20010810 (60) |
| | US 2001-325209P | 20010928 (60) |
| | US 2001-330629P | 20011026 (60) |
| | US 2001-331046P | 20011107 (60) |
| | US 2002-358554P | 20020222 (60) |
| | US 2002-358714P | 20020225 (60) |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | APPLICATION | |
| LEGAL REPRESENTATIVE: | HUMAN GENOME SCIENCES INC, INTELLECTUAL PROPERTY DEPT., 14200 SHADY GROVE ROAD, ROCKVILLE, MD, 20850, US | |
| NUMBER OF CLAIMS: | 14 | |
| EXEMPLARY CLAIM: | 1 | |
| LINE COUNT: | 27921 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to human secreted polypeptides, and isolated nucleic acid molecules encoding said polypeptides, useful for diagnosing and treating diseases, disorders, and/or conditions related to said human secreted proteins. Antibodies that bind these polypeptides are also encompassed by the present invention. Also encompassed by the invention are vectors, host cells, and recombinant and synthetic methods for producing said polynucleotides, polypeptides, and/or antibodies. The invention further encompasses screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further encompasses methods and compositions for inhibiting or enhancing the production and function of the polypeptides of the present invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L38 ANSWER 4 OF 15 USPATFULL on STN
 ACCESSION NUMBER: 2005:152003 USPATFULL
 TITLE: Gene expression during meningococcus adhesion
 INVENTOR(S): Grandi, Guido, Milan, ITALY
 PATENT ASSIGNEE(S): Chiron SRL, Siena, ITALY, 1-53100 (non-U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|---|------|---------------|
| PATENT INFORMATION: | US 2005130917 | A1 | 20050616 |
| APPLICATION INFO.: | US 2003-481456 | A1 | 20020619 (10) |
| | WO 2002-IB3072 | | 20020619 |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | APPLICATION | | |
| LEGAL REPRESENTATIVE: | Chiron Corporation, Intellectual Property - R440, P.O. Box 8097, Emeryville, CA, 94662-8097, US | | |

NUMBER OF CLAIMS: 31
 EXEMPLARY CLAIM: 1
 NUMBER OF DRAWINGS: 7 Drawing Page(s)
 LINE COUNT: 4001

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The first step in human meningococcal infection involves adhesion to the epithelial cells of the nasopharynx tract. The invention provides various methods and compounds for preventing the attachment of Neisserial cells to epithelial cells and is based on the identification of 347 meningococcal genes which play a role in the adhesion process.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L38 ANSWER 5 OF 15 USPATFULL on STN

ACCESSION NUMBER: 2004:315125 USPATFULL
 TITLE: Methods and reagents for regulation of cellular responses in biological systems
 INVENTOR(S): Kiessling, Laura L., Madison, WI, UNITED STATES
 Griffith, Byron R., Madison, WI, UNITED STATES
 Gestwicki, Jason E., Mountain View, CA, UNITED STATES
 Strong, Laura, Stoughton, WI, UNITED STATES

| | NUMBER | KIND | DATE |
|-----------------------|--|------|---------------|
| PATENT INFORMATION: | US 2004248801 | A1 | 20041209 |
| APPLICATION INFO.: | US 2004-806056 | A1 | 20040322 (10) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 2001-815296, filed on 21 Mar 2001, PENDING | | |

| | NUMBER | DATE |
|-----------------------|--|---------------|
| PRIORITY INFORMATION: | US 2003-456778P | 20030321 (60) |
| | US 2000-191014P | 20000321 (60) |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | APPLICATION | |
| LEGAL REPRESENTATIVE: | GREENLEE WINNER AND SULLIVAN P C, 5370 MANHATTAN CIRCLE, SUITE 201, BOULDER, CO, 80303 | |
| NUMBER OF CLAIMS: | 127 | |
| EXEMPLARY CLAIM: | 1 | |
| NUMBER OF DRAWINGS: | 27 Drawing Page(s) | |
| LINE COUNT: | 4275 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides multivalent ligands which carry or display at least one recognition element (RE), and preferably a plurality of recognition elements, for binding directly or indirectly to cells or other biological particles or more generally by binding to any biological molecule. The multivalent ligands provided can most generally function for binding or targeting to any biological particle or molecule and particularly to targeting of cells or cell types or viruses, for cell aggregation and generally for macromolecular assembly of biological macromolecules. The multivalent ligands of this invention are generally applicable for creating scaffolds (assemblies) of chemical or biological species, including without limitation, antigens, epitopes, ligand binding groups, ligands for cell receptors (cell surface receptors, transmembrane receptors and cytoplasmic receptors), and various macromolecules (nucleic acids, carbohydrates, saccharides, proteins,

peptides, etc.). In these scaffolds, the number, spacing, relative positioning and relative orientation of recognition elements can be controlled. Multivalent ligands of this invention can carry or display at least one signal recognition element (SRE), and preferably a plurality of signal recognition elements, and modulate biological responses in biological systems. Multivalent ligands of this invention can carry or display at least one binding recognition element (BRE), and preferably a plurality of binding recognition elements, optionally in combination with one or more SRE, and modulate biological responses in biological systems. The invention also relates to methods for aggregating biological particles and macromolecules and for modulating biological response employing the multivalent ligands provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L38 ANSWER 6 OF 15 USPATFULL on STN

ACCESSION NUMBER: 2004:151408 USPATFULL

TITLE: Molecules for diagnostics and therapeutics

INVENTOR(S): Panzer, Scott R, Sunnyvale, CA, UNITED STATES
 Lincoln, Stephen E, Potomac, MD, UNITED STATES
 Altus, Christina M, Campbell, CA, UNITED STATES
 Dufour, Gerard E, Castro Valley, CA, UNITED STATES
 Jackson, Jennifer L, Santa Cruz, CA, UNITED STATES
 Jones, Anissa L, San Jose, CA, UNITED STATES
 Dam, Tam C, San Jose, CA, UNITED STATES
 Liu, Tommy, Daly City, CA, UNITED STATES
 Harris, Bernard, Sunnyvale, CA, UNITED STATES
 Flores, Vincent Z, Union City, CA, UNITED STATES
 Daffo, Abel, San Jose, CA, UNITED STATES
 Marwaha, Rakesh, Burnaby, CANADA
 Chen, Alice J, San Jose, CA, UNITED STATES
 Chang, Simon C, Sunnyvale, CA, UNITED STATES
 Gerstin, Edward H, JR., San Jose, CA, UNITED STATES
 Peralta, Careyna H, Santa Clara, CA, UNITED STATES
 David, Marie H, Daly City, CA, UNITED STATES
 Lewis, Samantha A, San Leandro, CA, UNITED STATES

| | NUMBER | KIND | DATE |
|-----------------------|---|------|---------------|
| PATENT INFORMATION: | US 2004115629 | A1 | 20040617 |
| APPLICATION INFO.: | US 2003-250889 | A1 | 20030709 (10) |
| | WO 2002-US1009 | | 20020109 |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | APPLICATION | | |
| LEGAL REPRESENTATIVE: | INCYTE CORPORATION, 3160 PORTER DRIVE, PALO ALTO, CA, 94304 | | |
| NUMBER OF CLAIMS: | 28 | | |
| EXEMPLARY CLAIM: | 1 | | |
| LINE COUNT: | 16703 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides purified human polynucleotides for diagnostics and therapeutics (dithp). Also encompassed are the polypeptides (DITHP) encoded by dithp. The invention also provides for the use of dithp, or complements, oligonucleotides, or fragments thereof in diagnostic assays. The invention further provides for vectors and host cells containing dithp for the expression of DITHP. The invention additionally provides for the use of isolated and purified DITHP to induce antibodies and to screen libraries of

10/677980

compounds and the use of anti-DITHP antibodies in diagnostic assays.
Also provided are microarrays containing dithp and methods of use.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L38 ANSWER 7 OF 15 USPATFULL on STN

ACCESSION NUMBER: 2004:144630 USPATFULL
TITLE: Nucleic acid vectors
INVENTOR(S): Punnonen, Juha, Belmont, CA, UNITED STATES
Apt, Doris, Sunnyvale, CA, UNITED STATES
Whalen, Robert G., Foster City, CA, UNITED STATES
PATENT ASSIGNEE(S): Maxygen, Inc., a Delaware corporation, Redwood
City, CA, UNITED STATES, 94063 (U.S. corporation)

| | NUMBER | KIND | DATE |
|---------------------|----------------|------|---------------|
| PATENT INFORMATION: | US 2004110295 | A1 | 20040610 |
| APPLICATION INFO.: | US 2003-446629 | A1 | 20030528 (10) |

| | NUMBER | DATE |
|-----------------------|---|---------------|
| PRIORITY INFORMATION: | US 2002-384002P | 20020528 (60) |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | APPLICATION | |
| LEGAL REPRESENTATIVE: | MAXYGEN, INC., INTELLECTUAL PROPERTY DEPARTMENT, 515 GALVESTON DRIVE, RED WOOD CITY, CA, 94063 | |
| NUMBER OF CLAIMS: | 78 | |
| EXEMPLARY CLAIM: | 1 | |
| NUMBER OF DRAWINGS: | 8 Drawing Page(s) | |
| LINE COUNT: | 6550 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to nucleic acid vectors useful for expression
and production of polypeptides, compositions comprising vectors, and
methods for the production and use of vectors and polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L38 ANSWER 8 OF 15 USPATFULL on STN

ACCESSION NUMBER: 2004:78909 USPATFULL
TITLE: Non-stochastic generation of genetic vaccines and
enzymes
INVENTOR(S): Short, Jay M., Rancho Santa Fe, CA, United States
PATENT ASSIGNEE(S): Diversa Corporation, San Diego, CA, United States
(U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|--------------|
| PATENT INFORMATION: | US 6713279 | B1 | 20040330 |
| APPLICATION INFO.: | US 2000-498557 | | 20000204 (9) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 2000-495052, filed on 31 Jan 2000, now patented, Pat. No. US 6479253 Continuation-in-part of Ser. No. US 1999-332835, filed on 14 Jun 1999, now patented, Pat. No. US 6537776 Continuation-in-part of Ser. No. US 1999-276860, filed on 26 Mar 1999, now patented, Pat. No. US 6352842 Continuation-in-part of Ser. No. US 1999-267118, filed on 9 Mar 1999, now patented, Pat. No. US 6238884 Continuation-in-part of Ser. No. US 1999-246178, | | |

Searcher : Shears 571-272-2528

filed on 4 Feb 1999, now patented, Pat. No. US 6171820 Continuation-in-part of Ser. No. US 1998-185373, filed on 3 Nov 1998, now patented, Pat. No. US 6335179 Continuation of Ser. No. US 1996-760489, filed on 5 Dec 1996, now patented, Pat. No. US 5830696 Continuation-in-part of Ser. No. US 1997-962504, filed on 31 Oct 1997 Continuation-in-part of Ser. No. US 1996-677112, filed on 9 Jul 1996, now patented, Pat. No. US 5965408 Continuation-in-part of Ser. No. US 1996-651568, filed on 22 May 1996, now patented, Pat. No. US 5939250

| | NUMBER | DATE |
|-----------------------|--|---------------|
| PRIORITY INFORMATION: | US 1995-8311P | 19951207 (60) |
| | US 1995-8316P | 19951207 (60) |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | GRANTED | |
| PRIMARY EXAMINER: | Park, Hankyel T. | |
| LEGAL REPRESENTATIVE: | Love, Jane M., Butler, James E. | |
| NUMBER OF CLAIMS: | 105 | |
| EXEMPLARY CLAIM: | 1 | |
| NUMBER OF DRAWINGS: | 73 Drawing Figure(s); 64 Drawing Page(s) | |
| LINE COUNT: | 19098 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides methods of obtaining novel polynucleotides and encoded polypeptides by use of non-stochastic methods of directed evolution (DirectEvolution.TM.). These methods include non-stochastic polynucleotide site-saturation mutagenesis (Gene Site Saturation Mutagenesis.TM.) and non-stochastic polynucleotide reassembly (GeneReassembly.TM.). Through use of the claimed methods, genetic vaccines, enzymes, and other desirable molecules can be evolved towards desirable properties. For example, vaccine vectors can be obtained that exhibit increased efficacy for use as genetic vaccines. Vectors obtained by using the methods can have, for example, enhanced antigen expression, increased uptake into a cell, increased stability in a cell, ability to tailor an immune response, and the like. This invention provides methods of obtaining novel enzymes that have optimized physical &/or biological properties. Furthermore, this invention provides methods of obtaining a variety of novel biologically active molecules, in the fields of antibiotics, pharmacotherapeutics, and transgenic traits.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L38 ANSWER 9 OF 15 USPATFULL on STN

ACCESSION NUMBER: 2004:63735 USPATFULL
 TITLE: Molecules for diagnostics and therapeutics
 INVENTOR(S): Panzer, Scott R., Sunnyvale, CA, UNITED STATES
 Spiro, Peter A., Palo Alto, CA, UNITED STATES
 Banville, Steven C., Palo Alto, CA, UNITED STATES
 Shah, Purvi, San Jose, CA, UNITED STATES
 Chalup, Michael S., Sunnyvale, CA, UNITED STATES
 Chang, Simon C, Mountain View, CA, UNITED STATES
 Chen, Alice J., San Jose, CA, UNITED STATES
 D'Sa, Steven A., East Palo, CA, UNITED STATES
 Amshey, Stefan, San Francisco, CA, UNITED STATES
 Dahl, Christopher E., Fremont, CA, UNITED STATES

Dam, Tam C., San Jose, CA, UNITED STATES
 Daniels, Susan E., Palo Alto, CA, UNITED STATES
 Dufour, Gerard E., Castro Valley, CA, UNITED STATES
 Flores, Vincent, Union City, CA, UNITED STATES
 Fong, Willy T., San Francisco, CA, UNITED STATES
 Greenawalt, Lila B., San Jose, CA, UNITED STATES
 Jackson, Jennifer L., Mountain View, CA, UNITED STATES
 Jones, Anissa L., San Jose, CA, UNITED STATES
 Liu, Tommy F., Daly City, CA, UNITED STATES
 Lincoln, Ann M. Roseberry, Redwood City, CA, UNITED STATES
 Rosen, Bruce H., Menlo Park, CA, UNITED STATES
 Russo, Frank D., Rossette Court Sunnyvale, CA, UNITED STATES
 Stockdreher, Theresa K., Sunnyvale, CA, UNITED STATES
 Daffo, Abel, San Jose, CA, UNITED STATES
 Wright, Rachel J., Mountain View, CA, UNITED STATES
 Yap, Pierre E., Lafayette, CA, UNITED STATES
 Yu, Jimmy Y., Fremont, CA, UNITED STATES
 Bradley, Diana L., Soquel, CA, UNITED STATES
 Bratcher, Shawn R., Mountain View, CA, UNITED STATES
 Chen, Wensheng, Mountain View, CA, UNITED STATES
 Cohen, Howard J., Palo Alto, CA, UNITED STATES
 Hodgson, David M., Ann Arbor, MI, UNITED STATES
 Lincoln, Stephen E., Redwood City, CA, UNITED STATES
 Jackson, Stuart E., Mountain View, CA, UNITED STATES

| | NUMBER | KIND | DATE |
|-----------------------|--|------|---------------|
| PATENT INFORMATION: | US 2004048253 | A1 | 20040311 |
| APPLICATION INFO.: | US 2003-220120 | A1 | 20030605 (10) |
| | WO 2001-US6059 | | 20010221 |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | APPLICATION | | |
| LEGAL REPRESENTATIVE: | Incyte Genomics Inc, Legal Department, 3160 Porter Drive, Palo Alto, CA, 94304 | | |
| NUMBER OF CLAIMS: | 27 | | |
| EXEMPLARY CLAIM: | 1 | | |
| LINE COUNT: | 17872 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides purified human polynucleotides for diagnostics and therapeutics (dithp). Also encompassed are the polypeptides (DITHP) encoded by dithp. The invention also provides for the use of dithp, or complements, oligonucleotides, or fragments thereof in diagnostic assays. The invention further provides for vectors and host cells containing dithp for the expression of DITHP. The invention additionally provides for the use of isolated and purified DITHP to induce antibodies and to screen libraries of compounds and the use of anti-DITHP antibodies in diagnostic assays. Also provided are microarrays containing dithp and methods of use.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L38 ANSWER 10 OF 15 USPATFULL on STN

10/677980

ACCESSION NUMBER: 2004:18785 USPATFULL
TITLE: Molecules for diagnostics and therapeutics
INVENTOR(S): Hodgson, David M., Ann Arbor, MI, UNITED STATES
Lincoln, Stephen E., Potomac, MD, UNITED STATES
Russo, Frank D., Sunnyvale, CA, UNITED STATES
Albany, Peter A., Berkeley, CA, UNITED STATES
Banville, Steve C., Sunnyvale, CA, UNITED STATES
Bratcher, Shawn R., Mountain View, CA, UNITED STATES
Dufour, Gerard E., Castro Valley, CA, UNITED STATES
Cohen, Howard J., Palo Alto, CA, UNITED STATES
Rosen, Bruce H., Menlo Park, CA, UNITED STATES
Chalup, Michael S., Livingston, TX, UNITED STATES
Jackson, Jennifer L., Santa Cruz, CA, UNITED STATES
Jones, Anissa L., San Jose, CA, UNITED STATES
Yu, Jimmy Y., Fremont, CA, UNITED STATES
Greenawalt, Lila B., San Jose, CA, UNITED STATES
Panzer, Scott R., Sunnyvale, CA, UNITED STATES
Roseberry Lincoln, Ann M., Potomac, MD, UNITED STATES
Wright, Rachel J., Merivale, NEW ZEALAND
PATENT ASSIGNEE(S): Daniels, Susan E., Mountain View, CA, UNITED STATES
Incyte Corporation, Palo Alto, CA, UNITED STATES
(U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|---------------|
| PATENT INFORMATION: | US 2004014087 | A1 | 20040122 |
| APPLICATION INFO.: | US 2003-378029 | A1 | 20030228 (10) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 2001-980285, filed on 30 Nov 2001, PENDING A 371 of International Ser. No. WO 2000-US15404, filed on 31 May 2000, PENDING | | |

| | NUMBER | DATE |
|-----------------------|-----------------|---------------|
| PRIORITY INFORMATION: | US 1999-147500P | 19990805 (60) |
| | US 1999-147542P | 19990805 (60) |
| | US 1999-147541P | 19990805 (60) |
| | US 1999-147824P | 19990805 (60) |
| | US 1999-147547P | 19990805 (60) |
| | US 1999-147530P | 19990805 (60) |
| | US 1999-147536P | 19990805 (60) |
| | US 1999-147520P | 19990805 (60) |
| | US 1999-147527P | 19990805 (60) |
| | US 1999-147549P | 19990805 (60) |
| | US 1999-147377P | 19990804 (60) |
| | US 1999-147436P | 19990804 (60) |
| | US 1999-137411P | 19990603 (60) |
| | US 1999-137396P | 19990603 (60) |
| | US 1999-137417P | 19990603 (60) |
| | US 1999-137337P | 19990603 (60) |
| | US 1999-137173P | 19990602 (60) |
| | US 1999-137114P | 19990602 (60) |
| | US 1999-137259P | 19990602 (60) |
| | US 1999-137113P | 19990602 (60) |
| | US 1999-137260P | 19990602 (60) |
| | US 1999-137258P | 19990602 (60) |
| | US 1999-137109P | 19990602 (60) |

Searcher : Shears 571-272-2528

10/677980

US 1999-137161P 19990601 (60)
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: INCYTE CORPORATION (formerly known as Incyte,
Genomics, Inc.), 3160 PORTER DRIVE, PALO ALTO, CA,
94304
NUMBER OF CLAIMS: 19
EXEMPLARY CLAIM: 1
LINE COUNT: 14819

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides purified human polynucleotides for
diagnostics and therapeutics (dithp). Also encompassed are the
polypeptides (DITHP) encoded by dithp. The invention also provides
for the use of dithp, or complements, oligonucleotides, or fragments
thereof in diagnostic assays. The invention further provides for
vectors and host cells containing dithp for the expression of DITHP.
The invention additionally provides for the use of isolated and
purified DITHP to induce antibodies and to screen libraries of
compounds and the use of anti-DITHP antibodies in diagnostic assays.
Also provided are microarrays containing dithp and methods of use.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L38 ANSWER 11 OF 15 USPATFULL on STN

ACCESSION NUMBER: 2003:312155 USPATFULL

TITLE: Novel antigen binding molecules for therapeutic,
diagnostic, prophylactic, enzymatic, industrial,
and agricultural applications, and methods for
generating and screening thereof

INVENTOR(S): Short, Jay M., Rancho Santa Fe, CA, UNITED STATES
PATENT ASSIGNEE(S): Diversa Corporation, San Diego, CA, UNITED STATES,
92121 (U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|---|------|---------------|
| PATENT INFORMATION: | US 2003219752 | A1 | 20031127 |
| APPLICATION INFO.: | US 2002-151469 | A1 | 20020517 (10) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 2000-535754, filed on 27 Mar 2000, GRANTED, Pat. No. US 6361974 Continuation-in-part of Ser. No. US 2000-522289, filed on 9 Mar 2000, GRANTED, Pat. No. US 6358709 Continuation-in-part of Ser. No. US 2000-498557, filed on 4 Feb 2000, ABANDONED Continuation-in-part of Ser. No. US 2000-495052, filed on 31 Jan 2000, GRANTED, Pat. No. US 6479258 Continuation-in-part of Ser. No. US 1999-276860, filed on 26 Mar 1999, GRANTED, Pat. No. US 6352842 Continuation-in-part of Ser. No. US 1999-267118, filed on 9 Mar 1999, GRANTED, Pat. No. US 6238884 Continuation-in-part of Ser. No. US 1999-246178, filed on 4 Feb 1999, GRANTED, Pat. No. US 6171820 Continuation of Ser. No. US 1998-185373, filed on 3 Nov 1998, GRANTED, Pat. No. US 6335179 Continuation of Ser. No. US 1996-760489, filed on 5 Dec 1996, GRANTED, Pat. No. US 5830696 Continuation-in-part of Ser. No. US 1996-677112, filed on 9 Jul 1996, GRANTED, Pat. No. US 5965408 Continuation-in-part of Ser. No. WO 2000-US16838, filed on 14 Jun 2000, PENDING Continuation-in-part of Ser. No. WO 2000-US8245, | | |

Searcher : Shears 571-272-2528

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filed on 27 Mar 2000, PENDING Continuation-in-part
of Ser. No. WO 2000-US6497, filed on 9 Mar 2000,
PENDING Continuation-in-part of Ser. No. US
2000-594459, filed on 14 Jun 2000, PENDING
Continuation-in-part of Ser. No. US 1999-332835,
filed on 14 Jun 1999, GRANTED, Pat. No. US 6537776
Continuation-in-part of Ser. No. WO 2000-US3086,
filed on 4 Feb 2000, PENDING Continuation-in-part
of Ser. No. US 2001-756459, filed on 8 Jan 2001,
PENDING Continuation of Ser. No. US 1999-246178,
filed on 4 Feb 1999, GRANTED, Pat. No. US 6171820
Continuation of Ser. No. US 1998-185373, filed on 3
Nov 1998, GRANTED, Pat. No. US 6335179
Continuation-in-part of Ser. No. US 1996-760489,
filed on 5 Dec 1996, GRANTED, Pat. No. US 5830696
Continuation-in-part of Ser. No. US 1999-376727,
filed on 17 Aug 1999, GRANTED, Pat. No. US 6440668
Continuation of Ser. No. US 1996-677112, filed on 9
Jul 1996, GRANTED, Pat. No. US 5965408
Continuation-in-part of Ser. No. WO 1998-US22596,
filed on 23 Oct 1998, PENDING Continuation-in-part
of Ser. No. US 1999-214645, filed on 27 Sep 1999,
PENDING A 371 of International Ser. No. WO
1997-US12239, filed on 9 Jul 1997, PENDING
Continuation-in-part of Ser. No. US 2001-790321,
filed on 21 Feb 2001, PENDING Division of Ser. No.
US 2000-687219, filed on 12 Oct 2000, PENDING
Continuation-in-part of Ser. No. US 2000-636778,
filed on 11 Aug 2000, PENDING Continuation of Ser.
No. US 1998-98206, filed on 16 Jun 1998, GRANTED,
Pat. No. US 6174673 Continuation-in-part of Ser.
No. US 2001-876276, filed on 7 Jun 2001, GRANTED,
Pat. No. US 6468724 Continuation-in-part of Ser.
No. US 2001-761559, filed on 16 Jan 2001, PENDING
Division of Ser. No. US 1998-98206, filed on 16 Jun
1998, GRANTED, Pat. No. US 6174673
Continuation-in-part of Ser. No. US 1997-876276,
filed on 16 Jun 1997, PENDING Continuation-in-part
of Ser. No. US 2001-848185, filed on 3 May 2001,
PENDING Division of Ser. No. US 2000-636778, filed
on 11 Aug 2000, PENDING Continuation of Ser. No. US
1998-98206, filed on 16 Jun 1998, GRANTED, Pat. No.
US 6174673 Continuation-in-part of Ser. No. US
1997-876276, filed on 16 Jun 1997, PENDING
Continuation-in-part of Ser. No. US 2000-738871,
filed on 15 Dec 2000, PENDING Continuation-in-part
of Ser. No. US 2000-685432, filed on 10 Oct 2000,
PENDING Continuation-in-part of Ser. No. US
1999-444112, filed on 22 Nov 1999, PENDING
Continuation-in-part of Ser. No. US 1998-98206,
filed on 16 Jun 1998, GRANTED, Pat. No. US 6174673
Continuation-in-part of Ser. No. US 1997-876276,
filed on 16 Jun 1997, PENDING Continuation-in-part
of Ser. No. WO 2000-US32208, filed on 22 Nov 2000,
PENDING Continuation-in-part of Ser. No. WO
1998-US12674, filed on 16 Jun 1998, PENDING

NUMBER

DATE

Searcher : Shears 571-272-2528

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PRIORITY INFORMATION: US 2001-300381P 20010517 (60)
US 2001-300907P 20010625 (60)
US 1995-8311P 19951207 (60)
US 1995-8316P 19951207 (60)
US 1995-8311P 19951207 (60)
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FISH & RICHARDSON, PC, 4350 LA JOLLA VILLAGE DRIVE,
SUITE 500, SAN DIEGO, CA, 92122
NUMBER OF CLAIMS: 102
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 95 Drawing Page(s)
LINE COUNT: 23775
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention is directed to methods for generating sets, or libraries, of nucleic acids encoding antigen-binding sites, such as antibodies, antibody domains or other fragments, including single and double stranded antibodies, major histocompatibility complex (MHC) molecules, T cell receptors (TCRs), and the like. This invention provides methods for generating variant antigen binding sites, e.g., antibodies and specific domains or fragments of antibodies (e.g., Fab or Fc domains), by altering template nucleic acids including by saturation mutagenesis, synthetic ligation reassembly, or a combination thereof. In one aspect, invention provides methods for generating all human or humanized antibodies and evolving them to achieve optimized properties related to stability, duration, expression, production, enzymatic activity, affinity, avidity, localization, and other immunological properties. Polypeptides generated by these methods can be analyzed using a novel capillary array platform, which provides unprecedented ultra-high throughput screening.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L38 ANSWER 12 OF 15 USPATFULL on STN
ACCESSION NUMBER: 2003:294272 USPATFULL
TITLE: Non-stochastic generation of genetic vaccines
INVENTOR(S): Short, Jay M., Rancho Santa Fe, CA, UNITED STATES

| | NUMBER | KIND | DATE |
|-----------------------|---|------|---------------|
| PATENT INFORMATION: | US 2003207287 | A1 | 20031106 |
| APPLICATION INFO.: | US 2002-223507 | A1 | 20020819 (10) |
| RELATED APPLN. INFO.: | Continuation of Ser. No. US 2000-495052, filed on 31 Jan 2000, GRANTED, Pat. No. US 6479258 | | |
| | Continuation-in-part of Ser. No. US 1999-276860, filed on 26 Mar 1999, GRANTED, Pat. No. US 6352842 | | |
| | Continuation-in-part of Ser. No. US 1999-267118, filed on 9 Mar 1999, GRANTED, Pat. No. US 6238884 | | |
| | Continuation-in-part of Ser. No. US 1999-246178, filed on 4 Feb 1999, GRANTED, Pat. No. US 6171820 | | |
| | Continuation-in-part of Ser. No. US 1998-185373, filed on 3 Nov 1998, GRANTED, Pat. No. US 6335179 | | |
| | Continuation of Ser. No. US 1996-760489, filed on 5 Dec 1996, GRANTED, Pat. No. US 5830696 | | |
| | Continuation-in-part of Ser. No. US 1996-677112, filed on 9 Jul 1996, GRANTED, Pat. No. US 5965408 | | |

NUMBER DATE

Searcher : Shears 571-272-2528

PRIORITY INFORMATION: US 1995-8311P 19951207 (60)
 US 1995-8316P 19951207 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: HALE AND DORR LLP, 300 PARK AVENUE, NEW YORK, NY,
 10022

NUMBER OF CLAIMS: 69

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 61 Drawing Page(s)

LINE COUNT: 20997

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides methods of obtaining vaccines by use of non-stochastic methods of directed evolution (DirectEvolution.TM.). These methods include non-stochastic polynucleotide site-saturation mutagenesis (Gene Site Saturation Mutagenesis.TM.) and non-stochastic polynucleotide reassembly (GeneReassembly.TM.). Through use of the claimed methods, vectors can be obtained which exhibit increased efficacy for use as genetic vaccines. Vectors obtained by using the methods can have, for example, enhanced antigen expression, increased uptake into a cell, increased stability in a cell, ability to tailor an immune response, and the like.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L38 ANSWER 13 OF 15 USPATFULL on STN

ACCESSION NUMBER: 2003:250508 USPATFULL

TITLE: Heterologous fusion protein constructs comprising a Leishmania antigen

INVENTOR(S): Skeiky, Yasir, Bellevue, WA, UNITED STATES
 Brannon, Mark, Seattle, WA, UNITED STATES
 Guderian, Jeffrey, Lynwood, WA, UNITED STATES

PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, UNITED STATES
 (U.S. corporation)

| | NUMBER | KIND | DATE |
|---------------------|---------------|------|---------------|
| PATENT INFORMATION: | US 2003175294 | A1 | 20030918 |
| APPLICATION INFO.: | US 2002-98732 | A1 | 20020313 (10) |

| | NUMBER | DATE |
|-----------------------|--|---------------|
| PRIORITY INFORMATION: | US 2001-275837P | 20010313 (60) |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | APPLICATION | |
| LEGAL REPRESENTATIVE: | TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834 | |
| NUMBER OF CLAIMS: | 82 | |
| EXEMPLARY CLAIM: | 1 | |
| NUMBER OF DRAWINGS: | 10 Drawing Page(s) | |
| LINE COUNT: | 6952 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides a recombinant nucleic acid molecule encoding a fusion polypeptide, wherein the recombinant nucleic acid comprises a heterologous polynucleotide sequence encoding an antigen or an antigenic fragment, and a Leishmania polynucleotide sequence encoding a polypeptide or fragment thereof, wherein the Leishmania

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polynucleotide is selected from the group consisting of TSA polynucleotide, LeIF polynucleotide, M15 polynucleotide, and 6H polynucleotide. The invention also provides an expression cassette comprising the recombinant nucleic acid molecule, host cells comprising the expression cassette, compositions, fusion polypeptides, and methods of their use in diagnosis or in generating a protective immune response in hosts.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L38 ANSWER 14 OF 15 USPATFULL on STN

ACCESSION NUMBER: 2003:106914 USPATFULL

TITLE: Flea head, nerve cord, hindgut and malpighian tubule nucleic acid molecules, proteins and uses thereof

INVENTOR(S): Brandt, Kevin S., Windsor, CO, UNITED STATES
Gaines, Patrick J., Fort Collins, CO, UNITED STATES
Stinchcomb, Dan T., Fort Collins, CO, UNITED STATES
Wisnewski, Nancy, Fort Collins, CO, UNITED STATES

| | NUMBER | KIND | DATE |
|-----------------------|---|------|--------------|
| PATENT INFORMATION: | US 2003073827 | A1 | 20030417 |
| APPLICATION INFO.: | US 2001-991936 | A1 | 20011121 (9) |
| RELATED APPLN. INFO.: | Division of Ser. No. US 2000-543668, filed on 7 Apr 2000, PENDING | | |

| | NUMBER | DATE |
|-----------------------|---|---------------|
| PRIORITY INFORMATION: | US 1999-128704P | 19990409 (60) |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | APPLICATION | |
| LEGAL REPRESENTATIVE: | HESKA CORPORATION, INTELLECTUAL PROPERTY DEPT., 1613 PROSPECT PARKWAY, FORT COLLINS, CO, 80525 | |
| NUMBER OF CLAIMS: | 26 | |
| EXEMPLARY CLAIM: | 1 | |
| LINE COUNT: | 7791 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to flea head, nerve cord, hindgut and Malpighian tubule proteins; to flea head, nerve cord, hindgut and Malpighian tubule nucleic acid molecules, including those that encode such flea head, nerve cord, hindgut and Malpighian tubule proteins; to antibodies raised against such flea head, nerve cord, hindgut and Malpighian tubule proteins; and to compounds that inhibit flea head, nerve cord, hindgut and Malpighian tubule protein activity. The present invention also includes methods to obtain such proteins, nucleic acid molecules, antibodies, and inhibitory compounds. Also included in the present invention are therapeutic compositions comprising proteins, nucleic acid molecules, or protective compounds derived from proteins of the present invention as well as the use of such therapeutic compositions to protect animals from flea infestation. Also included in the present invention is the use of flea head, nerve cord, hindgut and Malpighian tubule proteins to derive inhibitory compounds.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L38 ANSWER 15 OF 15 USPATFULL on STN

ACCESSION NUMBER: 2002:297432 USPATFULL

Searcher : Shears 571-272-2528

10/677980

TITLE: Non-stochastic generation of genetic vaccines
INVENTOR(S): Short, Jay M., Rancho Santa Fe, CA, United States
PATENT ASSIGNEE(S): Diversa Corporation, San Diego, CA, United States
(U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|---|------|--------------|
| PATENT INFORMATION: | US 6479258 | B1 | 20021112 |
| APPLICATION INFO.: | US 2000-495052 | | 20000131 (9) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 1999-276860, filed on 26 Mar 1999 Continuation-in-part of Ser. No. US 1999-246178, filed on 4 Feb 1999, now patented, Pat. No. US 6171820 Continuation-in-part of Ser. No. US 1998-185373, filed on 3 Nov 1998 Continuation-in-part of Ser. No. US 1996-760489, filed on 5 Dec 1996, now patented, Pat. No. US 5830696 | | |

| | NUMBER | DATE |
|-----------------------|--|---------------|
| PRIORITY INFORMATION: | US 1995-8311P | 19951207 (60) |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | GRANTED | |
| PRIMARY EXAMINER: | Park, Hankyel T. | |
| LEGAL REPRESENTATIVE: | Gray Cary Ware & Freidenrich LLP, Haile, Lisa A. | |
| NUMBER OF CLAIMS: | 86 | |
| EXEMPLARY CLAIM: | 1 | |
| NUMBER OF DRAWINGS: | 66 Drawing Figure(s); 61 Drawing Page(s) | |
| LINE COUNT: | 19213 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides methods of obtaining vaccines by use of non-stochastic methods of directed evolution (DirectEvolution.TM.). These methods include non-stochastic polynucleotide site-saturation mutagenesis (Gene Site Saturation Mutagenesis.TM.) and non-stochastic polynucleotide reassembly (GeneReassembly.TM.). Through use of the claimed methods, vectors can be obtained which exhibit increased efficacy for use as genetic vaccines. Vectors obtained by using the methods can have, for example, enhanced antigen expression, increased uptake into a cell, increased stability in a cell, ability to tailor an immune response, and the like.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

FILE 'HCAPLUS' ENTERED AT 16:01:56 ON 22 NOV 2005

L1 27 SEA FILE=REGISTRY ABB=ON PLU=ON GLYCOPHORIN A ?/CN

L2 12304 SEA FILE=HCAPLUS ABB=ON PLU=ON L1 OR BAEBL OR ERYTHROCYT?
BIND? OR GLYCOPHORIN(W) (A OR B OR C OR E OR HA) OR
(EBA175 OR EBA OR EBP) (S) ERYTHROCYT? OR GLYCOCONNECTIN OR
GLYCO CONNECTIN OR SIALOGLYCOPROTEIN OR SIALO(W) (GLYCOPROTE
IN OR GLYCO PROTEIN) OR SIALOGLYCO PROTEIN

L3 284 SEA FILE=HCAPLUS ABB=ON PLU=ON L2 AND (PLASMODIUM OR
P) (W) FALCIPARUM

L8 1 SEA FILE=REGISTRY ABB=ON PLU=ON FORMAMIDE/CN

L9 23155 SEA FILE=HCAPLUS ABB=ON PLU=ON L8 OR FORMAMIDE OR
FORMIMIDIC OR METHANAMIDE OR NSC 748 OR NSC748

L10 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L3 AND L9

Searcher : Shears 571-272-2528

10/677980

L39 0 S L10 NOT L32

(FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH,
JICST-EPLUS, JAPIO' ENTERED AT 16:02:30 ON 22 NOV 2005)

L40 1 S L10

L41 0 S L40 NOT L35

(FILE 'HCAPLUS, MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH,
JICST-EPLUS, JAPIO, USPATFULL' ENTERED AT 16:05:40 ON 22 NOV 2005) *-Author(s)*

L42 4183 SEA ABB=ON PLU=ON "MAYER G"?/AU
L43 21778 SEA ABB=ON PLU=ON "MILLER L"?/AU
L44 5 SEA ABB=ON PLU=ON L42 AND L43
L45 25956 SEA ABB=ON PLU=ON L42 OR L43
L46 110 SEA ABB=ON PLU=ON L45 AND L3
L47 78 SEA ABB=ON PLU=ON L46 AND (PROTEIN OR POLYPROTEIN OR
POLYPEPTIDE OR PEPTIDE)

L50 14 S L47 AND (HYBRIDIS? OR HYBRIDIZ?)

L51 16 S L44 OR L50

L52 10 DUP REM L51 (6 DUPLICATES REMOVED)

L52 ANSWER 1 OF 10 USPATFULL on STN

ACCESSION NUMBER: 2005:275167 USPATFULL

TITLE: **Plasmodium falciparum**
erythrocyte binding
protein baebl for use as a
vaccine

INVENTOR(S): **Mayer, Ghislaine**, Gaithersburg, MD,
UNITED STATES
Miller, Louis H., Rockville; MD, UNITED
STATES

| | NUMBER | KIND | DATE |
|-----------------------|--|------|---------------|
| PATENT INFORMATION: | US 2005239730 | A1 | 20051027 |
| APPLICATION INFO.: | US 2003-677980 | A1 | 20031002 (10) |
| RELATED APPLN. INFO.: | Continuation of Ser. No. WO 2002-US10071, filed on 29 Mar 2002, PENDING | | |

| | NUMBER | DATE |
|--|---|---------------|
| PRIORITY INFORMATION: | US 2001-281130P | 20010402 (60) |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | APPLICATION | |
| LEGAL REPRESENTATIVE: | KNOBBE MARTENS OLSON & BEAR LLP, 2040 MAIN STREET, FOURTEENTH FLOOR, IRVINE, CA, 92614, US | |
| NUMBER OF CLAIMS: | 23 | |
| EXEMPLARY CLAIM: | 1 | |
| NUMBER OF DRAWINGS: | 8 Drawing Page(s) | |
| LINE COUNT: | 1806 | |
| CAS INDEXING IS AVAILABLE FOR THIS PATENT. | | |
| AB | The invention relates to Plasmodium falciparum Erythrocyte Binding Protein BAEBL for use as a vaccine. | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L52 ANSWER 2 OF 10 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on

Searcher : Shears 571-272-2528

STN
 ACCESSION NUMBER: 2005:302211 BIOSIS
 DOCUMENT NUMBER: PREV200510096236
 TITLE: Characterization of the Plasmodium falciparum erythrocyte-binding ligand EBL-1.
 AUTHOR(S): **Mayer, G.** [Reprint Author]; **Miller, L. H.**
 CORPORATE SOURCE: NIH, Lab Malaria and Vector Res, Bethesda, MD USA
 SOURCE: Molecular Biology of the Cell, (NOV 2004) Vol. 15, No. Suppl. S, pp. 464A-465A.
 Meeting Info.: 44th Annual Meeting of the American-Society-for-Cell-Biology. Washington, DC, USA. December 04 -08, 2004. Amer Soc Cell Biol.
 CODEN: MBCEEV. ISSN: 1059-1524.
 DOCUMENT TYPE: Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)
 LANGUAGE: English
 ENTRY DATE: Entered STN: 15 Aug 2005
 Last Updated on STN: 15 Aug 2005

DUPLICATE 1

L52 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 2
 ACCESSION NUMBER: 2002:777627 HCAPLUS
 DOCUMENT NUMBER: 137:293522
 TITLE: **Plasmodium falciparum erythrocyte binding protein BAEBL** for use as vaccine against malarial Plasmodium parasite
 INVENTOR(S): **Mayer, Ghislaine; Miller, Louis H.**
 PATENT ASSIGNEE(S): The Government of the United States of America, Represented by the Secretary, Department of Health and Human Services, USA
 SOURCE: PCT Int. Appl., 57 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|-------------|
| WO 2002078603 | A2 | 20021010 | WO 2002-US10071 | 20020329 |
| WO 2002078603 | A3 | 20030828 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| US 2005239730 | A1 | 20051027 | US 2003-677980 | 20031002 |
| PRIORITY APPLN. INFO.: | | | US 2001-281130P | P 20010402 |
| | | | WO 2002-US10071 | A1 20020329 |

AB The invention relates to **Plasmodium falciparum**

Erythrocyte Binding Protein BAEBL
for use as a vaccine.

L52 ANSWER 4 OF 10 USPATFULL on STN

ACCESSION NUMBER: 2002:301756 USPATFULL
TITLE: Binding domains from Plasmodium vivax and
Plasmodium falciparum erythrocyte
INVENTOR(S): Sim, Kim Lee, Gaithersburg, MD, UNITED STATES
Chitnis, Chetan, Washington, DC, UNITED STATES
Miller, Louis H., Bethesda, MD, UNITED STATES
Peterson, David S., Rockville, MD, UNITED STATES
Su, Xin-Zhuan, Rockville, MD, UNITED STATES
Wellems, Thomas E., Rockville, MD, UNITED STATES

| | NUMBER | KIND | DATE |
|--|---|------|---------------|
| PATENT INFORMATION: | US 2002169305 | A1 | 20021114 |
| | US 6962987 | B2 | 20051108 |
| APPLICATION INFO.: | US 2002-153273 | A1 | 20020521 (10) |
| RELATED APPLN. INFO.: | Continuation of Ser. No. US 1998-210288, filed on 11 Dec 1998, GRANTED, Pat. No. US 6392026 Division of Ser. No. US 1995-568459, filed on 7 Dec 1995, GRANTED, Pat. No. US 5849306 Continuation of Ser. No. US 1993-119677, filed on 10 Sep 1993, ABANDONED | | |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | APPLICATION | | |
| LEGAL REPRESENTATIVE: | KNOBBE MARTENS OLSON & BEAR LLP, 620 NEWPORT CENTER DRIVE, SIXTEENTH FLOOR, NEWPORT BEACH, CA, 92660 | | |
| NUMBER OF CLAIMS: | 1 | | |
| EXEMPLARY CLAIM: | 1 | | |
| NUMBER OF DRAWINGS: | 7 Drawing Page(s) | | |
| LINE COUNT: | 3119 | | |
| CAS INDEXING IS AVAILABLE FOR THIS PATENT. | | | |

AB The present invention provides isolated **polypeptides** useful in the treatment and prevention of malaria caused by **Plasmodium falciparum** or *P. vivax*. In particular, the **polypeptides** are derived from the binding domains of the **proteins** in the EBL family as well as the sialic acid binding **protein** (SABP) on *P. falciparum* merozoites. The **polypeptides** may also be derived from the Duffy antigen binding **protein** (DABP) on *P. vivax* merozoites.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L52 ANSWER 5 OF 10 USPATFULL on STN

ACCESSION NUMBER: 2002:116395 USPATFULL
TITLE: Binding domains from plasmodium vivax and
plasmodium falciparum
erythrocyte binding
proteins
INVENTOR(S): Sim, Kim Lee, Gaithersburg, MD, United States
Chitnis, Chetan, Washington, DC, United States
Miller, Louis H., Bethesda, MD, United States
Peterson, David S., Rockville, MD, United States
Su, Xin-Zhuan, Rockville, MD, United States
Wellems, Thomas E., Rockville, MD, United States

PATENT ASSIGNEE(S): The United States of America as represented by the
Department of Health and Human Services,
Washington, DC, United States (U.S. government)

| | NUMBER | KIND | DATE |
|-----------------------|---|------|--------------|
| PATENT INFORMATION: | US 6392026 | B1 | 20020521 |
| APPLICATION INFO.: | US 1998-210288 | | 19981211 (9) |
| RELATED APPLN. INFO.: | Division of Ser. No. US 1995-568459, filed on 7 Dec 1995, now patented, Pat. No. US 5849306 | | |
| | Continuation of Ser. No. US 1993-119677, filed on 10 Sep 1993, now abandoned | | |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | GRANTED | | |
| PRIMARY EXAMINER: | Navarro, Mark | | |
| LEGAL REPRESENTATIVE: | Knobbe, Martens, Olson & Bear LLP | | |
| NUMBER OF CLAIMS: | 18 | | |
| EXEMPLARY CLAIM: | 1 | | |
| NUMBER OF DRAWINGS: | 7 Drawing Figure(s); 7 Drawing Page(s) | | |
| LINE COUNT: | 1227 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides isolated **polypeptides** useful in the treatment and prevention of malaria caused by **Plasmodium falciparum** or **P. vivax**. In particular, the **polypeptides** are derived from the binding domains of the **proteins** in the EBL family as well as the sialic acid binding **protein** (SABP) on **P. falciparum** merozoites. The **polypeptides** may also be derived from the Duffy antigen binding **protein** (DABP) on **P. vivax** merozoites.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L52 ANSWER 6 OF 10 USPATFULL on STN

ACCESSION NUMBER: 1999:155211 USPATFULL

TITLE: Binding domains from plasmodium vivax and **plasmodium falciparum erythrocyte binding proteins**

INVENTOR(S): Sim, Kim Lee, Gaithersburg, MD, United States
Chitnis, Chetan, Washington, DC, United States
Miller, Louis H., Bethesda, MD, United States
Peterson, David S., Rockville, MD, United States
Su, Xin-Zhuan, Rockville, MD, United States
Wellems, Thomas E., Rockville, MD, United States

PATENT ASSIGNEE(S): The United States of America as represented by the
Secretary, Department of Health and Human Services,
Washington, DC, United States (U.S. government)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|--------------|
| PATENT INFORMATION: | US 5993827 | | 19991130 |
| APPLICATION INFO.: | US 1995-487826 | | 19950607 (8) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 1993-119677, filed on 10 Sep 1993, now abandoned | | |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Cunningham, Thomas M. | | |

10/677980

LEGAL REPRESENTATIVE: Knobbe Martens Olson & Bear
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Figure(s); 6 Drawing Page(s)
LINE COUNT: 4566

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides isolated **polypeptides** useful in the treatment and prevention of malaria caused by **Plasmodium falciparum** or *P. vivax*. In particular, the **polypeptides** are derived from the binding domains of the **proteins** in the DBL family as well as the sialic acid binding **protein** (SABP) on **P. falciparum** merozoites. The **polypeptides** may also be derived from the Duffy antigen binding **protein** (DABP) on *P. vivax* merozoites.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L52 ANSWER 7 OF 10 USPATFULL on STN

ACCESSION NUMBER: 1998:156927 USPATFULL

TITLE: Binding domains from *Plasmodium vivax* and **Plasmodium falciparum** erythrocyte binding **proteins**

INVENTOR(S): Sim, Kim Lee, Gaithersburg, MD, United States
Chitnis, Chetan, Washington, DC, United States
Miller, Louis H., Bethesda, MD, United States

Peterson, David S., Rockville, MD, United States
Su, Xin-Zhuan, Rockville, MD, United States
Wellems, Thomas E., Rockville, MD, United States

PATENT ASSIGNEE(S): The United States of America as represented by the Department of Health and Human Services, Washington, DC, United States (U.S. government)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|--------------|
| PATENT INFORMATION: | US 5849306 | | 19981215 |
| APPLICATION INFO.: | US 1995-568459 | | 19951207 (8) |
| RELATED APPLN. INFO.: | Continuation of Ser. No. US 1993-119677, filed on 10 Sep 1993, now abandoned | | |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Cunningham, Thomas M. | | |
| LEGAL REPRESENTATIVE: | Knobbe, Martens, Olson & Bear, LLP | | |
| NUMBER OF CLAIMS: | 12 | | |
| EXEMPLARY CLAIM: | 1 | | |
| NUMBER OF DRAWINGS: | 5 Drawing Figure(s); 4 Drawing Page(s) | | |
| LINE COUNT: | 2490 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides isolated **polypeptides** useful in the treatment and prevention of malaria caused by **Plasmodium falciparum** or *P. vivax*. In particular, the **polypeptides** are derived from the binding domains of the **proteins** in the EBL family as well as the sialic acid binding **protein** (SABP) on **P. falciparum** merozoites. The **polypeptides** may also be derived from the Duffy antigen binding **protein** (DABP) on *P. vivax* merozoites.

Searcher : Shears 571-272-2528

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L52 ANSWER 8 OF 10 USPATFULL on STN
 ACCESSION NUMBER: 96:68110 USPATFULL
 TITLE: Plasmodium vivax and Plasmodium knowlesi Duffy receptor
 INVENTOR(S): **Miller, Louis H.**, Bethesda, MD, United States
 Adams, John H., Bethesda, MD, United States
 Kaslow, David C., Kensington, MD, United States
 Fang, Xiangdong, Bethesda, MD, United States
 PATENT ASSIGNEE(S): The United States of America as represented by the Secretary of Health and Human Services, Washington, DC, United States (U.S. government)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|--------------|
| PATENT INFORMATION: | US 5541292 | | 19960730 |
| APPLICATION INFO.: | US 1992-916408 | | 19920721 (7) |
| RELATED APPLN. INFO.: | Division of Ser. No. US 1990-554837, filed on 20 Jul 1990, now patented, Pat. No. US 5198347 | | |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Draper, Garnette D. | | |
| ASSISTANT EXAMINER: | Ulm, John D. | | |
| LEGAL REPRESENTATIVE: | Townsend and Townsend Khourie and Crew | | |
| NUMBER OF CLAIMS: | 3 | | |
| EXEMPLARY CLAIM: | 1 | | |
| NUMBER OF DRAWINGS: | 52 Drawing Figure(s); 30 Drawing Page(s) | | |
| LINE COUNT: | 1120 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to DNA segments encoding the Duffy receptor of a Plasmodium parasite, the recombinant DNA and to recombinantly produced Duffy receptor. The Duffy receptor can be utilized as a vaccine for humans against malaria.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L52 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 3
 ACCESSION NUMBER: 1995:700782 HCAPLUS
 DOCUMENT NUMBER: 123:331352
 TITLE: Isolation of multiple sequences from the **Plasmodium falciparum** genome that encode conserved domains homologous to those in **erythrocyte-binding proteins**
 AUTHOR(S): Peterson, David S.; **Miller, Louis H.**; Wellems, Thomas E.
 CORPORATE SOURCE: Lab. Parasit. Dis., Natl. Inst. Allergy Infect. Dis., Bethesda, MD, 20892, USA
 SOURCE: Proceedings of the National Academy of Sciences of the United States of America (1995), 92(15), 7100-4
 CODEN: PNASA6; ISSN: 0027-8424
 PUBLISHER: National Academy of Sciences
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Open reading frames in the **Plasmodium falciparum**

genome encode domains homologous to the adhesive domains of the ***P. falciparum* EBA-175 erythrocyte-binding protein** (eba-175 gene product) and those of the *Plasmodium vivax* and *Plasmodium knowlesi* Duffy antigen-binding **proteins**. These domains are referred to as Duffy binding-like (DBL), after the receptor that detcs. *P. vivax* invasion of Duffy blood group-pos. human erythrocytes. Using oligonucleotide primers derived from short regions of conserved sequence, the authors have developed a reverse transcription-PCR method that amplifies sequences encoding the DBL domains of expressed genes. Products of these reverse transcription-PCR amplifications include sequences of single-copy genes (including eba-175) and variably transcribed genes that cross-hybridize to multiple regions of the genome. Restriction patterns of the multicopy genes show a high degree of polymorphism among different parasite lines, whereas single-copy genes are generally conserved. Characterization of the single-copy genes has identified a gene (ebl-1) that is related to eba-175 and is likely to be involved in **erythrocyte** invasion.

L52 ANSWER 10 OF 10 USPATFULL on STN

ACCESSION NUMBER: 93:24823 USPATFULL

TITLE: DNA encoding *Plasmodium vivax* and *Plasmodium knowlesi* Duffy receptor

INVENTOR(S): **Miller, Louis H.**, Bethesda, MD, United States

Adams, John H., Bethesda, MD, United States
Kaslow, David C., Kensington, MD, United States
Fang, Xiangdong, Bethesda, MD, United States

PATENT ASSIGNEE(S): The United States of America as represented by the Department of Health and Human Services, Washington, DC, United States (U.S. government)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|--------------|
| PATENT INFORMATION: | US 5198347 | | 19930330 |
| APPLICATION INFO.: | US 1990-554837 | | 19900720 (7) |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Lacey, David L. | | |
| ASSISTANT EXAMINER: | Ulm, John D. | | |
| LEGAL REPRESENTATIVE: | Cushman, Darby & Cushman | | |
| NUMBER OF CLAIMS: | 10 | | |
| EXEMPLARY CLAIM: | 1 | | |
| NUMBER OF DRAWINGS: | 54 Drawing Figure(s); 30 Drawing Page(s) | | |
| LINE COUNT: | 1121 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to DNA segments encoding the Duffy receptor of a *Plasmodium* parasite, the recombinant DNA and to recombinantly produced Duffy receptor. The Duffy receptor can be utilized as a vaccine for humans against malaria.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

FILE 'HOME' ENTERED AT 16:15:31 ON 22 NOV 2005

10/677980

=> d his ful

(FILE 'HCAPLUS' ENTERED AT 15:21:59 ON 22 NOV 2005)
DEL HIS Y
D COST

FILE 'HCAPLUS' ENTERED AT 15:24:46 ON 22 NOV 2005

FILE 'REGISTRY' ENTERED AT 15:25:00 ON 22 NOV 2005
E GLYCOPHORIN A/CN 5

L1 27 SEA ABB=ON PLU=ON GLYCOPHORIN A ?/CN
E BAEBL/CN 5

FILE 'HCAPLUS' ENTERED AT 15:25:30 ON 22 NOV 2005

L2 12304 SEA ABB=ON PLU=ON L1 OR BAEBL OR ERYTHROCYT? BIND? OR
GLYCOPHORIN(W) (A OR B OR C OR E OR HA) OR (EBA175 OR EBA
OR EBP) (S) ERYTHROCYT? OR GLYCOCONNECTIN OR GLYCO CONNECTIN
OR SIALOGLYCOPROTEIN OR SIALO(W) (GLYCOPROTEIN OR GLYCO
PROTEIN) OR SIALOGLYCO PROTEIN

L3 284 SEA ABB=ON PLU=ON L2 AND (PLASMODIUM OR P) (W) FALCIPARUM
D KWIC

L4 89 SEA ABB=ON PLU=ON L3 AND (VACCIN? OR IMMUNIS? OR
IMMUNIZ?)

L5 249 SEA ABB=ON PLU=ON L2(L) ((PLASMODIUM OR P) (W) FALCIPARUM)

L6 57 SEA ABB=ON PLU=ON L5(L) (VACCIN? OR IMMUNIS? OR IMMUNIZ?)

D KWIC
L7 1 SEA ABB=ON PLU=ON L3 AND FORMAMIDE
D TI AU
D KWIC

FILE 'REGISTRY' ENTERED AT 15:32:08 ON 22 NOV 2005
E FORMAMIDE/CN 5

L8 1 SEA ABB=ON PLU=ON FORMAMIDE/CN
D CN

FILE 'HCAPLUS' ENTERED AT 15:32:40 ON 22 NOV 2005

L9 23155 SEA ABB=ON PLU=ON L8 OR FORMAMIDE OR FORMIMIDIC OR
METHANAMIDE OR NSC 748 OR NSC748

L10 1 SEA ABB=ON PLU=ON L3 AND L9

L11 3 SEA ABB=ON PLU=ON L3 AND (HYBRIDIS? OR HYBRIDIZ?)

L12 163 SEA ABB=ON PLU=ON L5(L) (POLYPEPTIDE OR POLYPROTEIN OR
PROTEIN OR PEPTIDE)

FILE 'REGISTRY' ENTERED AT 15:35:37 ON 22 NOV 2005

L13 8 SEA ABB=ON PLU=ON ("QS-21" OR "DETOX-PC" OR "MPL-SE" OR
"MOGM-CSF" OR "TITERMAX-G" OR "CRL-1005" OR GERBU OR
TERAMIDE OR PSC97B OR ADJUMER OR "PG-026" OR "GSK-1" OR
GCMF OR "B-ALETHINE" OR "MPC-026" OR ADJUVAX OR CPG ODN
OR BETAFFECTIN OR ALUM OR MF59)/CN

L14 11 SEA ABB=ON PLU=ON (QS 21 OR DETOX-PC OR MOGM CSF OR
TITERMAX G OR CRL 1005 OR PSC 97B OR ADJUMER OR PG 026 OR
GSK 1 OR B ALETHINE OR MPC 026 OR BETAFFECTIN OR ALUM OR MF
59)/CN

L15 1 SEA ABB=ON PLU=ON DETOX PC/CN
E MOGM/CN

L16 1 SEA ABB=ON PLU=ON GCMF/CN
E TITERMAX/CN 5

L17 2 SEA ABB=ON PLU=ON (TITERMAX/CN OR "TITERMAX GOLD"/CN)

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E "B-ALETHINE"/CN 5
E "B-ALETHINE"/CN 5
L18 1 SEA ABB=ON PLU=ON B-ALETHINE/CN
L19 19 SEA ABB=ON PLU=ON L13 OR L14 OR L15 OR L16 OR L17 OR L18

FILE 'HCAPLUS' ENTERED AT 15:43:38 ON 22 NOV 2005
L20 47043 SEA ABB=ON PLU=ON L19 OR QS21 OR QS 21 OR DETOX PC OR
MPL SE OR MOGM OR TITERMAX OR CRL 1005 OR GERBU OR
TERAMIDE OR PSC97B OR ADJUMER OR (PG OR MPC) (W) (026 OR 26)
OR GSK(W) (1 OR I) OR GCMAF OR (B OR BETA) (W) ALETHINE OR
ADJUVAX OR CPG ODN OR BETAPECTIN OR ALUM OR MF59 OR MF 59
L21 149 SEA ABB=ON PLU=ON L20 AND MILLER ?/AU
L22 1 SEA ABB=ON PLU=ON L21 AND MAYER ?/AU
D KWIC

FILE 'REGISTRY' ENTERED AT 15:46:11 ON 22 NOV 2005
L*** DEL 1 S PSC 97B
L23 1 SEA ABB=ON PLU=ON PSC 97B/CN
E GERBU/CN
L24 4 SEA ABB=ON PLU=ON GERBU ?/CN

FILE 'HCAPLUS' ENTERED AT 15:46:43 ON 22 NOV 2005
D QUE L20
L25 48047 SEA ABB=ON PLU=ON L20 OR L23 OR L24 OR PSC 97B
L26 152 SEA ABB=ON PLU=ON L25 AND MILLER ?/AU
L27 1 SEA ABB=ON PLU=ON L26 AND MAYER ?/AU
D KWIC

FILE 'REGISTRY' ENTERED AT 15:48:02 ON 22 NOV 2005
E "GM-CSF"/CN 5
L28 9 SEA ABB=ON PLU=ON "GM-CSF"?/CN

FILE 'HCAPLUS' ENTERED AT 15:48:15 ON 22 NOV 2005
L29 68994 SEA ABB=ON PLU=ON L20 OR L23 OR L24 OR PSC 97B OR L28 OR
GMCSF OR (GM OR GRANUL?) (1W) (CSF OR COLONY STIMUL?)
L30 4 SEA ABB=ON PLU=ON L3 AND L29
L31 1 SEA ABB=ON PLU=ON L30 AND MAYER ?/AU
D KWIC

FILE 'REGISTRY' ENTERED AT 15:50:06 ON 22 NOV 2005

FILE 'HCAPLUS' ENTERED AT 15:50:06 ON 22 NOV 2005
D QUE L7
D QUE L30
L32 4 SEA ABB=ON PLU=ON L7 OR L30
D 1-4 .BEVSTR

FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH,
JICST-EPLUS, JAPIO' ENTERED AT 15:50:30 ON 22 NOV 2005
L33 1 SEA ABB=ON PLU=ON L7
L34 10 SEA ABB=ON PLU=ON L30
L35 10 SEA ABB=ON PLU=ON L33 OR L34
L36 6 DUP REM L35 (4 DUPLICATES REMOVED)
D 1-6 IBIB ABS

FILE 'USPATFULL' ENTERED AT 15:58:53 ON 22 NOV 2005
L37 59 SEA ABB=ON PLU=ON L3 AND L29
L38 15 SEA ABB=ON PLU=ON L37 AND (L9 OR FORMAMIDE)

Searcher : Shears 571-272-2528

10/677980

D QUE
D QUE
D 1-15 IBIB ABS

FILE 'HCAPLUS' ENTERED AT 16:01:04 ON 22 NOV 2005

D QUE L10
L39 0 SEA ABB=ON PLU=ON L10 NOT L32

FILE 'HCAPLUS' ENTERED AT 16:01:56 ON 22 NOV 2005

D QUE L10

FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH,
JICST-EPLUS, JAPIO' ENTERED AT 16:02:30 ON 22 NOV 2005

L40 1 SEA ABB=ON PLU=ON L10
L41 0 SEA ABB=ON PLU=ON L40 NOT L35

FILE 'HCAPLUS, MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH,
JICST-EPLUS, JAPIO, USPATFULL' ENTERED AT 16:05:40 ON 22 NOV 2005

L42 4183 SEA ABB=ON PLU=ON "MAYER G"?/AU
L43 21778 SEA ABB=ON PLU=ON "MILLER L"?/AU
L44 5 SEA ABB=ON PLU=ON L42 AND L43
L45 25956 SEA ABB=ON PLU=ON L42 OR L43
L46 110 SEA ABB=ON PLU=ON L45 AND L3
L47 78 SEA ABB=ON PLU=ON L46 AND (PROTEIN OR POLYPROTEIN OR
POLYPEPTIDE OR PEPTIDE)
L48 80 SEA ABB=ON PLU=ON L44 OR L47
L49 31 DUP REM L48 (49 DUPLICATES REMOVED)
L50 14 SEA ABB=ON PLU=ON L47 AND (HYBRIDIS? OR HYBRIDIZ?)
L51 16 SEA ABB=ON PLU=ON L44 OR L50
L52 10 DUP REM L51 (6 DUPLICATES REMOVED)
D 1-10 IBIB ABS

FILE 'HOME' ENTERED AT 16:15:31 ON 22 NOV 2005

FILE HCAPLUS

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FILE COVERS 1907 - 22 Nov 2005 VOL 143 ISS 22
FILE LAST UPDATED: 21 Nov 2005 (20051121/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

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STRUCTURE FILE UPDATES: 21 NOV 2005 HIGHEST RN 868586-21-4
DICTIONARY FILE UPDATES: 21 NOV 2005 HIGHEST RN 868586-21-4

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TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

Structure search iteration limits have been increased. See HELP SLIMI
for details.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

FILE MEDLINE

FILE LAST UPDATED: 16 NOV 2005 (20051116/UP). FILE COVERS 1950 TO DA

On December 19, 2004, the 2005 MeSH terms were loaded.

The MEDLINE reload for 2005 is now available. For details enter HELP
RLOAD at an arrow prompt (=>). See also:

<http://www.nlm.nih.gov/mesh/>
http://www.nlm.nih.gov/pubs/techbull/nd04/nd04_mesh.html

OLDMEDLINE now back to 1950.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the
MeSH 2005 vocabulary.

This file contains CAS Registry Numbers for easy and accurate
substance identification.

FILE BIOSIS

FILE COVERS 1969 TO DATE.

CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT
FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 16 November 2005 (20051116/ED)

FILE EMBASE

FILE COVERS 1974 TO 17 Nov 2005 (20051117/ED)

Searcher : Shears 571-272-2528

10/677980

EMBASE has been reloaded. Enter HELP RLOAD for details.

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FILE WPIDS

FILE LAST UPDATED: 22 NOV 2005 <20051122/UP>
MOST RECENT DERWENT UPDATE: 200575 <200575/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE,
PLEASE VISIT:
http://www.stn-international.de/training_center/patents/stn_guide.pdf

>>> FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE
<http://thomsonderwent.com/coverage/latestupdates/> <<<

>>> FOR INFORMATION ON ALL DERWENT WORLD PATENTS INDEX USER
GUIDES, PLEASE VISIT:
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DOCUMENTATION NOW AVAILABLE IN DERWENT WORLD PATENTS INDEX
FIRST VIEW - FILE WPIFV.
FOR FURTHER DETAILS: <http://www.thomsonderwent.com/dwpifv> <<<

>>> THE CPI AND EPI MANUAL CODES HAVE BEEN REVISED FROM UPDATE 200501.
PLEASE CHECK:
<http://thomsonderwent.com/support/dwpioref/reftools/classification/code>
FOR DETAILS. <<<

>>> PLEASE BE AWARE OF THE NEW IPC REFORM IN 2006, SEE
http://www.stn-international.de/stndatabases/details/ipc_reform.html <

FILE CONFSCI

FILE COVERS 1973 TO 25 May 2005 (20050525/ED)

FILE SCISEARCH

FILE COVERS 1974 TO 17 Nov 2005 (20051117/ED)

SCISEARCH has been reloaded, see HELP RLOAD for details.

FILE JICST-EPLUS

FILE COVERS 1985 TO 21 NOV 2005 (20051121/ED)

THE JICST-EPLUS FILE HAS BEEN RELOADED TO REFLECT THE 1999 CONTROLLED
TERM (/CT) THESAURUS RELOAD.

FILE JAPIO

FILE LAST UPDATED: 4 NOV 2005 <20051104/UP>
FILE COVERS APR 1973 TO JULY 28, 2005

<<< GRAPHIC IMAGES AVAILABLE >>>

>>> PLEASE BE AWARE OF THE NEW IPC REFORM IN 2006, SEE
http://www.stn-international.de/stndatabases/details/ipc_reform.html <

FILE USPATFULL

Searcher : Shears 571-272-2528

10/677980

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 22 Nov 2005 (20051122/PD)
FILE LAST UPDATED: 22 Nov 2005 (20051122/ED)
HIGHEST GRANTED PATENT NUMBER: US6968571
HIGHEST APPLICATION PUBLICATION NUMBER: US2005257307
CA INDEXING IS CURRENT THROUGH 22 Nov 2005 (20051122/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 22 Nov 2005 (20051122/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2005
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2005

>>> USPAT2 is now available. USPATFULL contains full text of the
>>> original, i.e., the earliest published granted patents or
>>> applications. USPAT2 contains full text of the latest US
>>> publications, starting in 2001, for the inventions covered in
>>> USPATFULL. A USPATFULL record contains not only the original
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>>> publication date for all the US publications for an invention
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>>> classifications, or claims, that may potentially change from
>>> the earliest to the latest publication.

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FILE HOME

Patent US20020127241-A1

;; CURRENT FILING DATE: 2001-08-07
;; PRIOR APPLICATION NUMBER: US 60/223,525
;; PRIOR FILING DATE: 2000-08-07
;; NUMBER OF SEQ ID NOS: 12
;; SOFTWARE: PatentIn version 3.1
;; SEQ ID NO 14
;; LENGTH: 1143
;; TYPE: PRT
;; ORGANISM: Mammalian
US-09-924-154-14

Query Match 93.8%; Score 6081; DB 3; Length 1143;
Best Local Similarity 99.6%; Pred. No. 0;
Matches 1130; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

| | | | |
|----|-----|--|-----|
| QY | 1 | MKGYNIIYFLIPLIPLYNVIRINESIIIGRTLYNRQDESSDISRVNSPELNNHKTNIYDS | 60 |
| DB | 7 | MKGYNIIYFLIPLIPLYNVIRINESIIIGRTLYNRQDESSDISRVNSPELNNHKTNIYDS | 66 |
| QY | 61 | DYEDVNNKGLINSFVENKSVKKKRSISFINNKTYSYDIIPPSYSYRNDKENSISENEDNSG | 120 |
| DB | 67 | DYEDVNNKGLINSFVENKSVKKKRSISFINNKTYSYDIIPPSYSYRNDKENSISENEDNSG | 126 |
| QY | 121 | NTNSNNPANTSEISIGDKNKQYTFIQKRTHLFACGIGKRSIKWICRENSEKITVCVPDRK | 180 |
| DB | 127 | NTNSNNPANTSEISIGDKNKQYTFIQKRTHLFACGIGKRSIKWICRENSEKITVCVPDRK | 186 |
| QY | 181 | IOLCVANFLNSLETWKEFKELIPLISVNTPEAKLLYNKNEGKDPSPFCNELRNSPSPFRSS | 240 |
| DB | 187 | IOLCIANFLNSLETWKEFKELIPLISVNTPEAKLLYNKNEGKDPSPFCNELRNSPSPFRSS | 246 |
| QY | 241 | FIGDDMDGQNTDRVKGYINTKPSDYKKEKNVEKLNIIKKEWKEKNKALNNHMI VNHKG | 300 |
| DB | 247 | FIGDDMDGQNTDRVKGYINTKPSDYKKEKNVEKLNIIKKEWKEKNKALNNHMI VNHKG | 306 |
| QY | 301 | NISKECAIIPAREPQINLWIKENNFLEKKEKRLFLNIKDKVENKCKYBACPGGCLPCS | 360 |
| DB | 307 | NISKECAIIPAREPQINLWIKENNFLEKKEKRLFLNIKDKVENKCKYBACPGGCLPCS | 366 |
| QY | 361 | SVTSPMKKSKTQMEVLTNLYKKKNSGVDRKNNFLNDFKQNNKQDLDLDDFFKNKEXYDDLCD | 420 |
| DB | 367 | SVTSPMKKSKTQMEVLTNLYKKKNSGVDRKNNFLNDFKQNNKQDLDLDDFFKNKEXYDDLCD | 426 |
| QY | 421 | CRYTATIIKSFPLNGPAKNDVDIASQINVNDLGRGCGNYKSNNEKSNWCTGTFTNKPGTC | 480 |
| DB | 427 | CRYTATIIKSFPLNGPAKNDVDIASQINVNDLGRGCGNYKSNNEKSNWCTGTFTNKPGTC | 486 |
| QY | 481 | EPFRQTLCLGRTYLLHGHEDYKHEHLCASITYEAQLLKYKKEKQENALCSIIQNSYA | 540 |
| DB | 487 | EPFRQTLCLGRTYLLHGHEDYKHEHLCASITYEAQLLKYKKEKQENALCSIIQNSYA | 546 |
| QY | 541 | DLADIIKGSDDIIKDYVYKQWENLNKVNKDKKRNESLKIIFREKWDENKENVKNSAV | 600 |
| DB | 547 | DLADIIKGSDDIIKDYVYKQWENLNKVNKDKKRNESLKIIFREKWDENKENVKNSAV | 606 |
| QY | 601 | LKNKETCKDYDKEOKIPOFLRWFKWGGDDFCERKEKIIYSFESFKVECKKCCDENTCKN | 660 |
| DB | 607 | LKNKETCKDYDKEOKIPOFLRWFKWGGDDFCERKEKIIYSFESFKVECKKCCDENTCKN | 666 |
| QY | 661 | KCSYKCKWIDLKKSSEYKQVDKYTKDKNNKQVNDIDEVKNKEANVYLKESKCKOVNFD | 720 |
| DB | 667 | KCSYKCKWIDLKKSSEYKQVDKYTKDKNNKQVNDIDEVKNKEANVYLKESKCKOVNFD | 726 |
| QY | 721 | DKIFNESPNYEYDMCKCKDEIKYLNBIKYPKTKHDIYDIDTFSDTFDGDGTFPISINANINE | 780 |
| DB | 727 | DKIFNESPNYEYDMCKCKDEIKYLNBIKYPKTKHDIYDIDTFSDTFDGDGTFPISINANINE | 786 |
| QY | 781 | QSGGKDTNNTGNSSETSDSPVSHPEPESDAAINVEKLSGDESSSETRGLINDPSVTNNV | 840 |
| DB | 787 | QSGGKDTNNTGNSSETSDSPVSHPEPESDAAINVEKLSGDESSSETRGLINDPSVTNNV | 846 |
| QY | 841 | EVHDAASNTGGSVNTSDITNGHSESSINRTTNAQDIKIGRSQNEQSDNQENSHSSDNSG | 900 |

Db 847 EVIDASNTQGSVNTSDITNGHSESLNRTTNAQDIKIGSGNEQSDNQENSHSDNSG 906
QY 901 SLTIGQVPSQEDNTQNTYDSQNPFRDTPNALASLPDDKINEIEGFDSSRDSSENGRGTTS 960
Db 907 SLTIGQVPSQEDNTQNTYDSQNPFRDTPNALASLPDDKINEIEGFDSSRDSSENGRGTTS 966
QY 961 NTHDVRRTNIVSERRVNSHDFIRNGMANNNAHQYITQIENNGIIRGQESAGNSVNYKD 1020
Db 967 NTHDVRRTNIVSERRVNSHDFIRNGMANNNAHQYITQIENNGIIRGQESAGNSVNYKD 1026
QY 1021 NPKRNFSSNDHKKNIOEYNSRDTKRVREELKLSKQKCNNEYSMEYCTYSDERNSSP 1080
Db 1027 NPKRNFSSNDHKKNIOEYNSRDTKRVREELKLSKQKCNNEYSMEYCTYSDERNSSP 1086
QY 1081 GPCSRERKLCQOISDYCLYFNFYSIYNYNCIKSEIKSPYKCFKSEGOSSI 1134
Db 1087 GPCSRERKLCQOISDYCLYFNFYSIYNYNCIKSEIKSPYKCFKSEGOSSM 1140